

APPROVED: 27 November 2024  
doi: 10.2903/sp.efsa.2024.EN-9138

# The practice of mutilations in turkeys (*Meleagris gallopavo gallopavo*): exercise of the EFSA Networks on Animal Welfare

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## Abstract

The EFSA Animal Health and Welfare (AHAW) Network Animal Welfare includes two subgroups: the subgroup specialised on Animal Welfare (AW) and the subgroup of the scientific National Contact Points (NCPs) for scientific support established under Art 20 of Council Regulation (EC) 1099/2009. In March 2024, during the annual meeting of the EFSA Network subgroups, EFSA conducted an information-gathering exercise on mutilation practices in turkeys, both breeders and turkeys kept for meat production, focusing on beak trimming, toe trimming de-toeing, and de-snooding, across different countries. Prior to the meeting, a questionnaire was distributed to the Network members to gather comprehensive data on these practices, including the methods employed, the age at which the mutilations are performed, the individuals responsible for performing them, and the use of analgesia or anaesthesia. The questionnaire also explored measures in place to reduce the need for these mutilations and any alternative strategies being implemented. During the meeting, participants engaged in a structured discussion, elaborating on questionnaire responses and providing additional insights and clarifications. This exercise resulted in a comprehensive overview of current mutilation practices in turkey farming across the represented countries. The information included in this report will support the risk assessment of the scientific opinion on the welfare of turkeys on farm, expected to be delivered by the EFSA AHAW Panel in 2025.

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**Key words:** turkeys, mutilations, beak trimming, de-toeing, toe trimming, de-snooding, animal welfare

**Question number:** EFSA-Q-2024-00673

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**Acknowledgements:** EFSA wishes to thank the members of the EFSA working group on the welfare of turkeys on farm for the preparatory work provided to this scientific output: Antonio Velarde, Jutta Berk, Joanna Marchewka, Anja B. Riber, Nienke van Staaveren and Virginie Michel for the feedback they provided on the questionnaire. EFSA wishes to thank the AHAW and NCPs Network members (including EFTA countries) and observers that submitted the data, participated in the meeting discussion and provided clarifications. EFSA wishes to thank Andrea Buselli and Christa Tabara Ohler for their support putting together the EU Survey and the ad-interim staff Margaux Adamo for the preparatory work and the support provided during the meeting.

**Suggested citation:** EFSA (European Food Safety Authority), Rojo Gimeno C, Balmos OM, Candiani DF, Van der Stede Y and Fabris C, 2024. The practice of mutilations in turkeys (*Meleagris gallopavo gallopavo*)– exercise of the EFSA Networks on Animal Welfare. EFSA supporting publication 2024:EN-9138. 30 pp. doi:10.2903/sp.efsa.2024.EN-9138

**ISSN:** 2397-8325

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## Summary

To address the Farm to Fork mandate on the welfare of turkeys (*Meleagris gallopavo gallopavo*) on farm, EFSA has initiated a comprehensive evaluation of the mutilation practices associated with turkey farming in the EU. In 2024, as part of this evaluation, EFSA conducted an exercise to collect information on various mutilations performed on turkeys across EU Member States and EFTA countries.

Before the annual meeting held in March 2024, Network members were asked to complete a questionnaire regarding practices such as beak trimming, de-toeing, de-snooding and other mutilations on turkeys raised for meat production and breeding purposes. The questionnaire aimed at gathering information from each country on the prevalence and methods of these mutilations, the age at which they are performed, if it is performed in males (henceforth called toms) and females (henceforth called hens), the responsible person to conduct these procedures, if anaesthesia or analgesia is applied, any measures in place to minimise the need for mutilations, and how much of a welfare issue it was perceived as if the mutilation would not be carried out. In total, 19 Network members replied to the questionnaire. Two respondents were from two regions (Flanders and Wallonia) of Belgium. Therefore, information from 18 countries were gathered.

During the annual meeting, Network members discussed the collected data in detail, providing further clarification and insights into their responses. The findings indicate that some countries have national legislative frameworks regulating turkey mutilation practices, however, there is considerable variation on how these practices are implemented. For example, in Finland, Sweden and Norway mutilations in turkeys, including beak trimming, are prohibited by national legislation. The exercise also underscored that in Germany there are specific guidelines and regulations governing beak trimming, with the aim of phasing out the practice, and including the mandatory use of analgesia. Beak trimming was identified as the most widespread mutilation practiced in both toms and hens kept for meat and breeding purposes, reported by 10 out of 19 respondents, primarily to prevent injurious pecking (severe feather pecking and cannibalism). According to respondents, it would be a big issue if beak trimming was not conducted. It is important to note that no respondents reported to conduct de-toeing, defined as the removal of the hallux or the II digit. However, two Network members reported to perform toe trimming (the burning of the germinal bed of the three forward facing digits of the turkeys) in both toms and hens kept for meat production purposes, and in one case also in breeders. In addition, de-snooding is less common and practiced in only a few countries and only in toms. All mutilations are practiced to prevent injuries; however, it was reported that turkeys that are not toe-trimmed or de-snooded are not perceived as posing a higher risk for injuries and scratches on the body with regards to non-toe trimmed birds and wounds at the snood with regards to non de-snooded turkeys. No other forms of mutilation were reported by the Network members.

The relevant information gathered from this exercise will contribute to the development of the scientific opinion on the welfare of turkeys on farm, to be delivered by EFSA AHAW Panel in 2025.



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## 1 Introduction

The Farm to Fork (F2F) strategy was published in May 2020 and includes a new comprehensive approach by the European Commission (EC) to increase food sustainability in the European Union (EU). Under the framework of the F2F strategy, the EC has started a comprehensive evaluation of the animal welfare legislation, and from 2020 mandated the European Food Safety Authority (EFSA) to develop Scientific Opinions on welfare aspects of various animal species on farm. EFSA has delivered Scientific Opinions on the welfare of pigs, laying hens and broiler chickens (EFSA AHAW Panel, 2022, 2023 a, b) with a welfare assessment of the mutilations performed in these species. In October 2023, EFSA received a mandate<sup>1</sup> to deliver a Scientific Opinions on the welfare on-farm of turkeys (*Meleagris gallopavo gallopavo*). A specific term of reference of the EC mandate (ToR B, Request 2e) requests to assess "the risks to welfare associated with the practice of mutilations in turkeys, with a particular focus on beak trimming, de-toeing, and de-snooding".

In March 2024 during the annual meeting, EFSA and its Network subgroups dealing with animal welfare topics (AHAW Network - Animal Welfare topic and scientific National Contact Points Network for Council Regulation (EC) 1099/2009) performed an exercise to collect evidence on the use of mutilations on turkeys. The exercise focused on the following mutilations: beak trimming, de-toeing, toe trimming and de-snooding. Network members shared information and knowledge from the practical experience acquired in their respective countries. This Technical report aims to report in a structured way the information received by the Network members.

## 2 Data and Methodology

### 2.1 Questionnaires on the mutilations performed on turkeys

Before the annual meeting held in March 2024, EFSA asked the Network members to complete a questionnaire (see Appendix A) to collect information on mutilations practiced on turkeys (*Meleagris gallopavo gallopavo*) (i.e., domestic turkey raised for the purpose of meat production or for breeding) from their countries and on measures implemented to reduce the need for mutilations.

The questionnaire was composed by a first 'general' part and a second part specific for each mutilation. The mutilations investigated in the questionnaire were:

- **Beak trimming:** the removal of the beak tip by using different procedures (adapted from EFSA AHAW Panel, 2023a).
- **De-toeing** (also called toe-clipping): the removal of the outermost joint of the toe pointing backwards (digit I, hallux) and occasionally also digit II (adapted from EFSA AHAW Panel, 2023b).
- **De-snooding:** the removal of the snood (see figure 1a, Appendix A) which is the fleshy appendage that drapes over a turkey's beak.

<sup>1</sup> <https://open.efsa.europa.eu/questions/EFSA-Q-2023-00647>

- Any other mutilations performed on turkeys in the EU Members States that Network members were aware of.

The questionnaire investigated the mutilations practiced on males (henceforth called toms) and/or females (henceforth called hens) in the following categories:

- Turkeys kept for meat production or fattening turkeys;
- Turkey breeders.

Furthermore, for each listed mutilation and for breeders and fattening turkeys, the Network members were requested to indicate in the questionnaire:

- If the mutilation is currently applied in their countries and how frequently;
- The methods used to perform the mutilation and, if multiple methods are used, an indication or estimation of the prevalence (%) of animals subjected to each method;
- The age at which animals undergo the mutilation procedure;
- The qualifications or permissions required for individuals to perform the mutilation;
- If analgesic and anaesthetic is used, which type and for how long;
- If there is any study, report or technical document linking the mutilation to animal welfare;
- If there is any strategy, project, study, field practice used as an alternative to prevent the need for the mutilation;
- If the mutilation is not performed, how much of a welfare issue it would be;
- Considering that mutilations are mainly conducted to prevent the injuries caused by injurious pecking or the toenails, it was asked whether guidelines exist (e.g. in relation to enrichment) to avoid injurious pecking and scratches in non-mutilated flocks.

For the detailed list of questions please see Appendix A.

## 2.2 Exercise during the meeting

During the annual Network meeting held on 20<sup>th</sup> of March 2024, the questionnaire replies submitted by the Network members were further elaborated and discussed in the plenary session.

## 2.3 Analysis and reporting of the information received

The information received from the questionnaires and the exercise during the meeting was analysed; the results from the submitted data are reported in Section 3 in an aggregate and anonymous form, i.e. specific reference to individual responses by Network members representing their countries/regions is not given.

Individual reference to countries/regions is only provided when a link to national/regional legislative frameworks was shared.

### 3 Results

In total, 19 compiled questionnaires were submitted to EFSA by Network members. Two respondents were representing two regions (Flanders and Wallonia) of the same country (Belgium). Two Network members reported the absence of turkey farms. Therefore, information from 17 questionnaires (representing 16 countries and one region) were collected, discussed during the exercise, and analysed.

From the questionnaires, the presence of farms with turkeys kept for meat production was reported by 17 Network members, whereas the presence of turkey breeder farms was only reported by 11 Network members.

Although there is no EU legislation that regulates the welfare of turkeys on farm, there are some countries with specific national/regional legislative framework regulating turkey mutilations. For example, in Finland<sup>2</sup>, Norway<sup>3</sup> and Sweden<sup>4</sup> the removal of body parts in turkeys is strictly prohibited. In Iceland<sup>5</sup>, while debeaking is forbidden, the removal of the non-vital part of the beak is permitted. In the federal state of Lower Saxony in Germany there are specific guidelines and regulations governing beak trimming<sup>6</sup> practice, including the mandatory use of analgesia<sup>7</sup>, and in the whole Germany there are discussions to phase out beak trimming in turkeys (Grün et al., 2021).

Regarding the practice of de-toeing, it resulted that this mutilation is not performed in turkeys. However, during the exercise with Network members, it was clarified that instead toe trimming is reported to be practiced in two countries. Therefore, the practice of toe trimming was further discussed during the meeting (see Section 3.2). No other mutilations were reported to be performed on fattening turkeys or breeders.

Four Network members (Germany<sup>8</sup>, Ireland, Italy and the Netherlands) reported to have national guidelines on enrichment (e.g., pecking blocks, platforms, and straw bales) for avoiding injurious pecking.

Network members reported that data is not collected on the behaviours (e.g., injurious pecking) and indicators (such as wounds and scratches) that the mutilations are intended to prevent.

<sup>2</sup> <https://www.finlex.fi/fi/laki/alkup/2010/2010067>

<sup>3</sup> <https://lovdata.no/dokument/SF/forskrift/2001-12-12-1494>

<sup>4</sup> Animal Welfare Act (Djurskyddslag 2018:1192). In chapter 4, section 2: [https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/djurskyddslag-20181192\\_sfs-2018-1192/#K4](https://www.riksdagen.se/sv/dokument-och-lagar/dokument/svensk-forfattningssamling/djurskyddslag-20181192_sfs-2018-1192/#K4) (last checked on 25/10/2024)

<sup>5</sup> <https://island.is/reglugerdir/nr/0088-2022> Article 9 Regulation No. 88/2022 on welfare of poultry (last checked on 23/10/2024)

<sup>6</sup> <https://www.gesetze-im-internet.de/tierschg/BjNR012770972.html> (last checked on 24/10/2024)

<sup>7</sup> [https://voris.wolterskluwer-online.de/browse/source/csh-da-filter%21a52e918e-8a02-41f8-8b62-1c4b6a92ff6a--WKDE\\_LTR\\_0000003520%23f67db815c16c3de6b1d66f7c0846acf3](https://voris.wolterskluwer-online.de/browse/source/csh-da-filter%21a52e918e-8a02-41f8-8b62-1c4b6a92ff6a--WKDE_LTR_0000003520%23f67db815c16c3de6b1d66f7c0846acf3) (last checked on 24/10/2024)

<sup>8</sup> <https://www.laves.niedersachsen.de/startseite/tiere/tierschutz/tierhaltung/geflugel/ausstieg-aus-dem-schnabelkurzen-bei-puten-empfehlungen-zur-vermeidung-des-auftretens-von-federpicken-und-kannibalismus-180775.html> (last checked on 24/10/2024)

In the following sections 3.1, 3.2 and 3.3, the information on beak trimming, toe trimming and de-snooding provided by Network members in the questionnaires and during the plenary discussion are presented in detail.

### 3.1 Beak trimming

Among the 17 questionnaires, ten Network members reported that beak trimming is performed on turkeys. In five cases, beak trimming was reported in both breeders and fattening turkeys and in other five cases in fattening turkeys only (see Figure 1). In 4 out of the latter 5 cases turkey breeders are not reared.

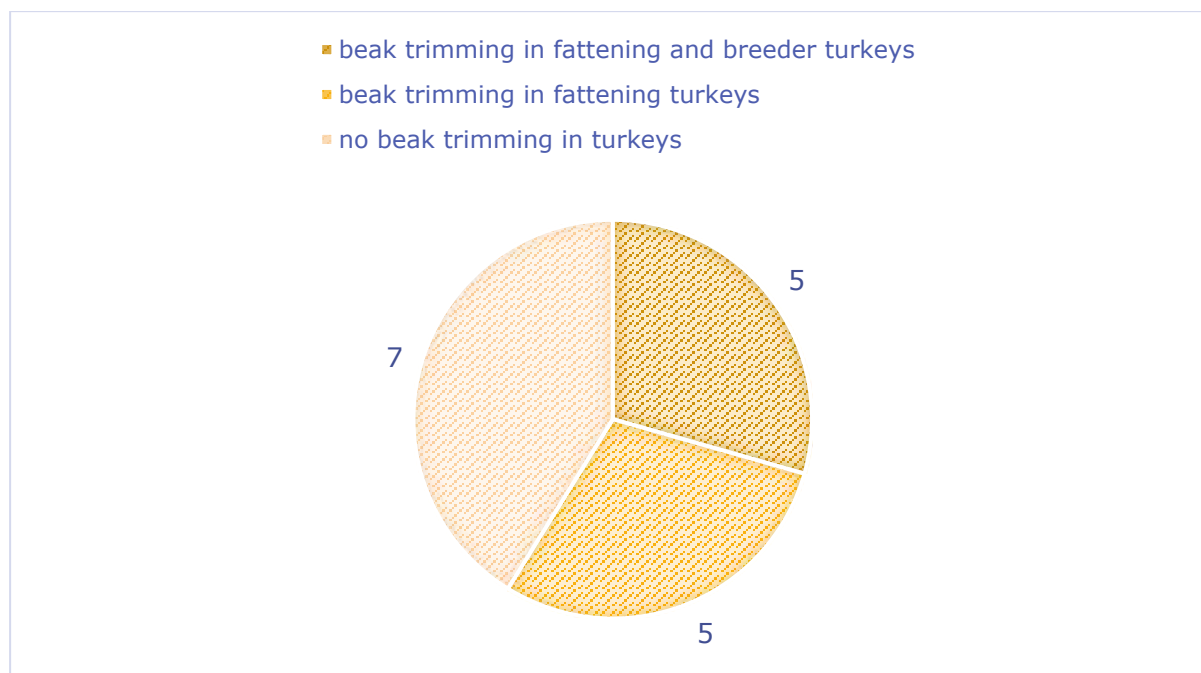


Figure 1: Pie chart distribution of responses of beak-trimming in fattening turkeys and turkey breeders (n=17). The number of respondents for each category is indicated outside the portions.

Out of these ten, eight Network members specified that beak trimming is practiced on both toms and hens; four reported that it is performed on all animals of the flock, while in one case it is performed on a low percentage of the flock. Beak trimming is usually performed on one-day old poults at the hatchery.

Regarding housing systems, Network members indicated that beak trimming is performed in fattening turkeys housed in all three systems (indoor, free-range, and covered veranda), or only in free-range and indoor systems, or exclusively in indoor systems (see Figure 2). This result shows that the practice of beak trimming is not linked to the type of housing system.

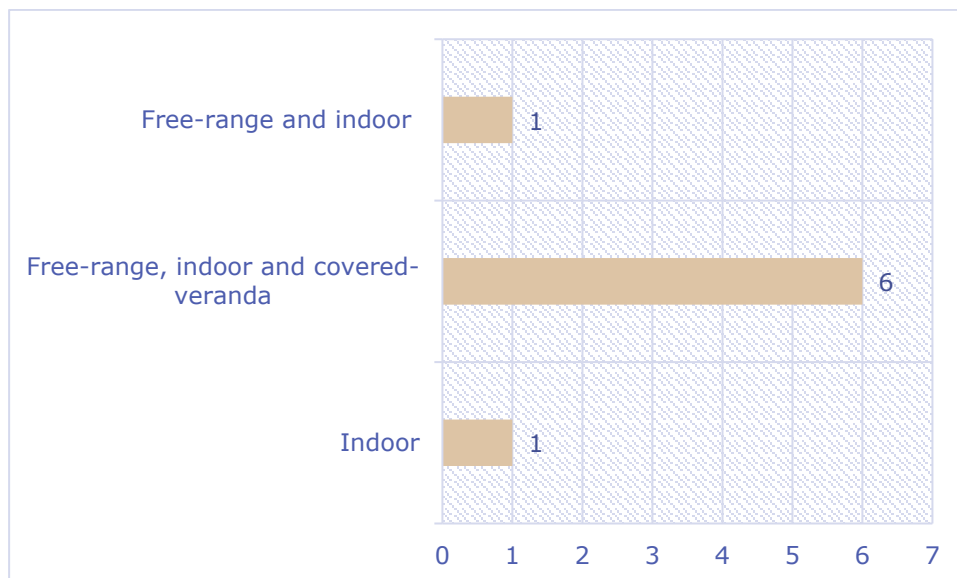


Figure 2: Practice of beak trimming on fattening turkeys reported in various types of housing systems. The x-axis indicates the number of respondents.

In relation to the reason for beak trimming of fattening and breeding turkeys, it resulted that it is performed primarily to prevent behaviours, such as injurious pecking, which includes cannibalism, feather pecking and aggressive pecking.

It was reported that in Germany there is a specific guideline on how to perform beak trimming in turkeys, while in Ireland industry guidelines are in place and some specific requirements are needed for participation in quality assurance schemes.

From the questionnaire it resulted that beak trimming is primarily performed by food business operators (FBOs), stockmen, or delegates, whereas in fewer cases it is performed by the veterinarian practitioners or official veterinarians (see Figure 3). In three cases, training for personnel conducting beak trimming is provided by FBOs, experienced personnel, or certified workshops. One Network member specified that this mutilation is performed only if the veterinarian recommends it, and by personnel trained and supervised by a veterinarian.

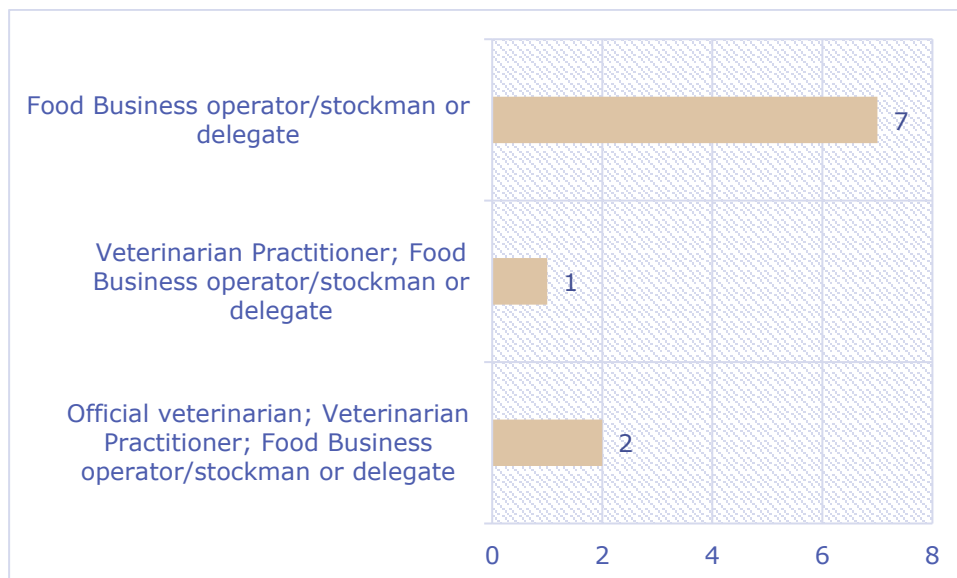


Figure 3: The personnel involved in beak trimming on turkeys. The x-axis indicates the number of respondents.

Six Network members reported that beak trimming is mostly performed using automatic infrared laser machines (by Nova-Tech Engineering LLC<sup>6</sup>) that are able of trimming 3,000-5,000 turkeys per hour. However, also other instruments are used; for instance, the use of hot-blade beak trimmers was reported in 3 cases. Two Network members reported using a combination of tools, such as Bio-beakers and infrared trimmers. In one case a combination of manual and automatic tools was reported.

In the federal state of Lower Saxony in Germany general analgesia with non-steroidal anti-inflammatory drugs after beak trimming procedure is provided (see Section 3).

In relation to the question what part of the beak is trimmed, it resulted that in most cases (N=9) only the upper beak is trimmed. One Network member reported the trimming of both the upper and lower parts of the beak. However, the part of the beak that is removed varies among the countries. From the ten replies on beak trimming, three Network members reported that only the tip of the beak is trimmed, whereas in three cases the trimming reaches 20% of the beak. One Network member reported the trimming of almost 30% of the beak and in three cases no information on this aspect was reported.

Two Network members reported that turkeys may experience difficulties in feeding, drinking, or foraging immediately after beak trimming, with one respondent outlining that these issues could persist for the turkey's entire life, leading to beak deformation and chronic pain. Four Network members reported that turkeys are kept under observation (monitoring e.g. lesions and behavioural changes) for some hours post-intervention; and in one case, to avoid bleeding, vitamin K is supplemented.

In reply to the question if other procedures are performed during beak trimming, five Network members replied that vaccination or other mutilations (e.g., toe trimming

<sup>6</sup> The reporting of any commercial products or technologies by Network Members does not imply any endorsement by EFSA.

reported by two respondents) are conducted. None reported that beak trimming is repeated later in the life of the turkeys.

Regarding the potential impact of not beak trimming, 80% of the replies (n=5) indicated that it would result in major welfare issues due to injurious pecking.

Network members from countries where beak trimming is not performed or allowed, reported that different management measures are in place in their countries supporting the prevention of injuries caused by the non-beak trimmed turkeys. These measures relate, for example, to space allowance, growth rate, presence of enrichment, light schedule, and feed provision.

### 3.2 Toe trimming


Toe trimming is defined as the burning of the germinal bed of the three forward facing digits of the turkeys (Mailyan and van Schie, 2019). Toe trimming was reported to be conducted in two countries: in one country on fattening hens and toms and breeders, and in the second country reported to conduct toe trimming on fattening hens. One country reported to conduct toe trimming in a low percentage of the flock and another country in 40% of the turkey hens. In both countries, toe trimming is performed at the hatchery on the one-day old poults, using a technological procedure from Nova-Tech Engineering LLC that is an automatic trimming machine and one Network member reported that supplementary tools such as surgical scissors, shears, nail clippers, and hot blades are used. One Network member explained that the automatic trimming machine is an automated treatment supervised by FBOs, stockmen, or delegates receiving internal training from by Nova-Tech Engineering LLC technicians. In the second country, also official veterinarians and veterinarian practitioners perform the mutilation. One Network member specified that this mutilation trims approximately 4% of the toe. It was reported that toe trimming is not repeated along the life of the turkey. The reason reported for toe trimming is to prevent injuries and scratches among fattening turkeys. In the case of turkey breeders, toe trimming also prevents injuries to the operators during the handling to harvest of the semen that is needed for the artificial insemination process.

No Network members reported the use of analgesia or anaesthesia during toe trimming, although it was reported that turkeys may experience temporary difficulties in walking, perching, and foraging immediately and for a few hours after being toe-trimmed. During the toe trimming process, one Network member replied that also vaccinations are administered, while in the other country beak trimming is simultaneously performed.

No measures have been reported to be implemented to reduce the need for this mutilation in the two countries where the practice of toe trimming was reported. From the exercise, it resulted that injuries caused by the toes are not a big issue in the countries where toe trimming is not conducted.

### 3.3 De-snooding

De-snooding was reported to be conducted in turkey toms in two countries: in one country on fattening turkeys and turkey breeders, and in the second one only on turkey breeders. The prevention of injuries on the snood from injurious pecking amongst turkeys was the reported reason for practicing this mutilation.



Limited information was reported by the Network members on the procedure of de-snooding; in one case it was specified that it is conducted by the FBOs, stockmen, or delegates. In a second country, also official veterinarians and veterinarian practitioners perform this mutilation. One Network member reported that the snood is removed in day-old poults by applying pressure with the thumb and nail or nail clippers. The Network member from the other country reported that anaesthesia is locally applied.

From the exercise it resulted that if turkeys are not de-snooded, it would not be an issue for injurious pecking at the snoods.

## 4 Conclusion

To address a specific request in the mandate on the welfare of turkeys on farm, EFSA is assessing the risk to welfare associated with beak trimming and other mutilations (e.g., de-toeing, toe trimming and de-snooding) and is collecting information about the use of these practices from its Networks.

During the EFSA Network meeting held in March 2024, the Network members shared their practical knowledge on the mutilations performed on turkeys in their countries/regions and the measures applied to prevent the need for these mutilations.

Beak trimming and de-snooding are performed to prevent injuries and wounds due to injurious pecking aggressive pecking and cannibalism between conspecifics. Based on the feedback received by Network members, de-toeing is not performed in turkeys; however, to prevent injuries due to scratching, toe trimming is conducted.

Beak trimming is the mutilation performed most commonly in fattening turkeys and turkey breeders of both sexes and it is not linked to the type of housing system. Some legislative provisions banning this mutilation exist at national level; however, it was highlighted that if beak trimming is not conducted it may be a major issue for injurious pecking.

From the replies of Network members from countries where beak trimming is not performed or allowed, it can be concluded that the assessment and implementation of a number of management measures can play a role in the prevention of the need of beak trimming as well as of the injuries caused by the non-beak trimmed turkeys. These measures relate, for example, to space allowance, growth rate, presence of enrichment, light schedule, and feed provision.

Toe trimming and de-snooding are practiced only in very few countries; turkeys that are neither toe-trimmed nor de-snooded are not perceived as posing a higher risk for injuries, scratches, and wounds at the snood.

There is no collection of data on the turkey behaviour of injurious pecking and on the indicators (such as wounds and scratches) that the mutilations are intended to prevent.

The information included in this report will be considered for the welfare assessment to be included in the scientific opinion on the welfare of turkeys on farm, expected to be adopted by the EFSA AHAW Panel in 2025.



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## Appendix A: EFSA Questionnaire on “mutilations performed for turkeys” in the EU Member States and EFTA countries

The following questionnaire was sent to Network members.

### A.1. Sections of the questionnaire:

1. Background
2. Mutilations: general part
3. Performing beak trimming
4. Not performing beak trimming
5. Performing de-toeing
6. Not performing de-toeing
7. Performing de-snooding
8. Not performing de-snooding

#### A.1.1. Background

The European Commission (EC) has requested the European Food Safety Authority (EFSA) with a mandate on welfare of turkeys on the farm.

In the mandate from the EC, EFSA needs to assess the welfare consequences related to mutilations in turkeys. In particular, the request includes the following mutilations: beak trimming; de-toeing; de-snooding.

#### A.2.1. Mutilations: general part

The mutilations that we will investigate in this survey are:

##### A.2.1.1. Beak trimming

Beak trimming is the removal of the beak tip by using different procedures (adapted from EFSA AHAW Panel, 2023b).

##### A.2.1.2. De-toeing

De-toeing (also called toe clipping) is the removal of the outermost joint of the toe pointing backwards (digit I, hallux) and occasionally also digit II (adapted from EFSA AHAW Panel, 2023a).

##### A.2.1.3. De-snooding

De-snooding is the removal of the snood which is the fleshy appendage that drapes over a turkey's beak (see Figure 1A where the snood is indicated with a white oval).

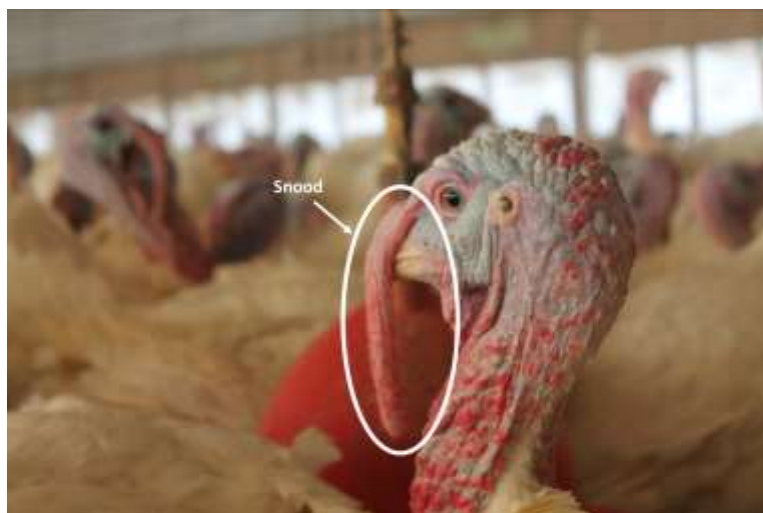


Figure 1A: Illustration of a domestic turkey's snood (© Joanna Marchewka).

1. Is there any national legislation which regulates the mutilations of turkeys?
  - Yes
  - If Yes, please provide reference to the document
  - No
  - There are no turkeys farm in my country

Considering the mutilations and definitions listed above:

2. Is beak trimming performed in your country for turkeys kept for meat production?
  - Yes
  - No
  - There are no farms keeping turkeys for meat production in my country
3. Is beak trimming performed in your country for turkey breeders?
  - Yes
  - No
  - There are no farms keeping turkey breeders in my country
4. Is de-toeing performed in your country for turkeys kept for meat production?
  - Yes
  - No
  - There are no farms keeping turkeys for meat production in my country
5. Is de-toeing performed in your country for turkey breeders?
  - Yes
  - No
  - There are no farms keeping turkey breeders in my country
6. Is de-snooding performed in your country for turkeys kept for meat production?
  - Yes
  - No
  - There are no farms keeping turkeys for meat production in my country
7. Is de-snooding performed in your country for turkey breeders?

## The practice of mutilation in turkeys

- Yes
  - No
  - There are no farms keeping turkey breeders in my country
8. Are other (e.g., de-spurring) mutilations performed in your country for turkeys kept for meat production?
- Yes
  - If Yes, please specify which mutilations, describe them and indicate if performed in toms and/or hens
  - No
  - I don't know
  - There are no farms keeping turkeys for meat production in my country
9. Are other (e.g., de-spurring) mutilations performed in your country for turkey breeders?
- Yes
  - If Yes, please specify which mutilations, describe them and indicate if performed in toms and/or hens
  - No
  - I don't know
  - There are no farms keeping turkey breeders in my country

### A.3.1. Performing beak trimming


#### A.3.1.1. Turkeys kept for meat production

The questions in this section (from 1 to 29) are related to the practice of beak trimming in turkeys for meat production. If in your country differences exist for breeders, these differences can be reported in the reply to question 30.

1. In which husbandry system is beak trimming performed in turkeys kept for meat production in your country? *(Mark all that apply)*
  - Free-range
  - Indoor
  - Cover veranda
  - I don't know
  - I prefer not to answer
2. Specify the reasons for beak trimming of turkeys kept for meat production?  
*Please specify*
3. Is beak trimming conducted for males (toms)?
  - Yes
  - If Yes, please specify on which percentage
  - No
  - I don't know
  - I prefer not to answer
4. Is beak trimming conducted for females (hens)?
  - Yes
  - If Yes, please specify on which percentage

## The practice of mutilation in turkeys

- No
  - I don't know
  - I prefer not to answer
5. Have specific guidelines (e.g., national guidelines, guidelines from hybrid companies, quality schemes etc.) been produced on beak trimming?
- Yes
  - If Yes, please specify and provide the reference
  - No
  - I don't know
  - I prefer not to answer
6. Who does beak trim the turkeys? (Mark all that apply)
- Official veterinarian
  - Veterinarian Practitioner
  - Food Business operator/stockman or delegate
7. Has the person received training for performing the mutilations?
- Yes
  - If Yes, please specify which training (certified workshops and others)
  - No
  - I don't know
  - I prefer not to answer
8. How many birds are beak trimmed per person/day?  
*Please specify*
9. At which stage is beak trimming done? (Mark all that apply)
- At the hatchery
  - On farm hatching
  - On the growing farm after hatching
  - I don't know
  - I prefer not to answer
10. At which age the beak trimming is done?  
*Please specify it in days*
11. What part of the beak is trimmed?
- Upper beak only
  - Lower beak only
  - Upper and lower beak
  - I don't know
  - I prefer not to answer
12. Please indicate the approximately length of the beak that is trimmed  
*Please specify the percentage of the beak*
13. What type of instruments are used? (Mark all that apply)
- Scissors
  - Shears
  - Secateurs

- 
- Automatic beak trimmers
  - Beak trimming machines, Bio-beaker
  - Hot blade beak trimming: red-hot blade handheld trimmers
  - Infrared beak trimmers
  - Laser
  - Others. *Please specify the type of instruments used*
  - I don't know
  - I prefer not to answer
14. Is capsaicin or other chemicals (see Glatz, 2000) used for avoiding regrowth of the beak?
- Yes
  - No
  - I don't know
  - I prefer not to answer
15. Is another procedure (mutilation; e.g., de-snooding, de-toeing or vaccination) made during beak trimming?
- Yes
  - If Yes, *please specify the other procedure performed (e.g., de-snooding, de-toeing or vaccination)*
  - No
  - I don't know
  - I prefer not to answer
16. Are analgesia/anaesthesia applied?
- Yes, analgesia is applied
  - Yes, anaesthesia is applied
  - Yes, both
  - No
  - I don't know
  - I prefer not to answer
17. How are analgesia/ anaesthesia applied? (*Mark all that apply*)
- Locally. *Please specify the drug*
  - General. *Please specify the drug*
  - I don't know
  - I prefer not to answer
18. How is the turkey restrained during beak trimming?  
*Please specify*
19. Are there any reported cases that led to asphyxia during the restraining?
- Yes
  - If Yes, *please specify which percentage*
  - No
  - I don't know
  - I prefer not to answer
20. Are there any reported cases of bone lesions during the restraining?
- Yes

## The practice of mutilation in turkeys

- If Yes, please specify which percentage
- No
- I don't know
- I prefer not to answer

21. Are the turkeys kept under observation after the beak trimming?

- Yes
- If Yes, please specify for how long and where they are kept under observation
- If Yes, please specify what Animal-Based Measures (ABMs) are observed (e.g., behaviour, lesions, etc.)
- No
- I don't know
- I prefer not to answer

22. Are turkeys having difficulties for feeding/drinking/foraging after the beak trimming?

- Yes
- If Yes, please specify the percentage of turkeys having difficulties
- No
- I don't know
- I prefer not to answer

23. When do these difficulties occur? (Mark all that apply)

- Immediately after trimming
- During the whole life due to the beak deformation/ chronic pain
- I don't know
- I prefer not to answer

24. Is beak trimming repeated?

- Yes
- If Yes, please specify in which cases (e.g., regrowth), at which average age, if it is done in toms, hens
- No
- I don't know
- I prefer not to answer

25. Are measures being implemented in your country to reduce the need of beak trimming?

- Yes
- If Yes, please specify the measures
- No
- I don't know
- I prefer not to answer

26. Do guidelines exist in your country in relation to enrichment (e.g., use of pecking blocks, platforms, strawbales) for avoiding feather pecking and injurious pecking of turkeys?

- Yes
- If Yes, please specify what type and provide the reference
- No

- I don't know
  - I prefer not to answer
27. If some turkeys are not beak trimmed in your country, how much do you think it is an issue for feather pecking?
- No issue at all
  - A small issue
  - A big issue
  - I don't know
  - I prefer not to answer
28. If some turkeys are not beak trimmed in your country, how much do you think it is an issue for injurious pecking (excluding feather pecking)?
- No issue at all
  - A small issue
  - A big issue
  - I don't know
  - I prefer not to answer
29. Do you have any databases or recording of the prevalence of feather pecking and injurious pecking?
- Yes
  - If Yes, *please specify*
  - No
  - I don't know
  - I prefer not to answer

#### A.3.1.2. Beak trimming for turkey breeders

30. Is beak trimming different between turkey breeders and turkeys kept for meat production?
- Yes
  - If Yes, *please specify which aspect asked in questions 1-29 is different*
  - No
  - I don't know
  - I prefer not to answer

#### A.4.1. Not performing beak trimming

1. In non-beak trimmed flocks, which husbandry and management practices have been implemented in your country to prevent the need of beak trimming?  
*Please specify and provide reference (e.g., regulation, industry guidelines, etc.).*
2. Since when have these management and husbandry practices been implemented?  
*Please specify*
3. Is there a derogation in your country to beak trim turkeys?
  - Yes
  - If Yes, *please specify the derogation (how and when it is applied)*
  - No
  - I do not know

- I prefer not to answer
- 4. Do guidelines exist in your country in relation to enrichment (e.g., use of pecking blocks, platforms, strawbales) for avoiding feather pecking and injurious pecking of turkeys?
  - Yes
  - If Yes, *please specify the guidelines and provide the reference*
  - No
  - I don't know
  - I prefer not to answer
- 5. If turkeys are not beak trimmed in your country, how much do you think it is an issue for feather pecking?
  - No issue at all
  - A small issue
  - A big issue
  - I don't know
  - I prefer not to answer
- 6. If turkeys are not beak trimmed in your country, how much do you think it is an issue for injurious pecking (excluding feather pecking)?
  - No issue at all
  - A small issue
  - A big issue
  - I don't know
  - I prefer not to answer
- 7. Do you have any databases or recording of the prevalence of feather pecking and injurious pecking?
  - Yes
  - If Yes, *please specify*
  - No
  - I don't know
  - I prefer not to answer

### **A.5.1. Performing de-toeing**

#### **A.5.1.1. Turkeys kept for meat production**

The questions in this section (from 1 to 26) are related to the practice of de-toeing in turkeys for meat production. If in your country differences exist for breeders, these differences can be reported in the reply to question 27.

1. In which husbandry system is de-toeing performed in turkeys kept for meat production in your country? *(Mark all that apply)*
  - Free-range
  - Indoor
  - Cover veranda
  - I don't know
  - I prefer not to answer
2. Specify the reasons for de-toeing of turkeys kept for meat production?

*Please specify*

3. Is de-toeing conducted for males (toms)?
- Yes
  - If Yes, please specify on which percentage
  - No
  - I don't know
  - I prefer not to answer
4. Is de-toeing conducted for females (hens)?
- Yes
  - If Yes, please specify on which percentage
  - No
  - I don't know
  - I prefer not to answer
5. Have specific guidelines (e.g., national guidelines, guidelines from hybrid companies, quality schemes etc.) been produced on de-toeing?
- Yes
  - If Yes, please specify and provide the reference
  - No
  - I don't know
  - I prefer not to answer
6. Who does de-toe the turkeys? (Mark all that apply)
- Official veterinarian
  - Veterinarian Practitioner
  - Food Business operator/stockman or delegate
7. Has this person received training for performing the mutilations?
- Yes
  - If Yes, please specify which training (certified workshops and others)
  - No
  - I don't know
  - I prefer not to answer
8. How many birds are de-toed per person/day?
- Please specify*
9. At which stage is de-toeing done? (Mark all that apply)
- At the hatchery
  - On farm hatching
  - On the growing farm after hatching
  - I don't know
  - I prefer not to answer
10. At which age is the de-toeing done?
- Please specify it in days*
11. Please indicate the approximate length of the toe that is trimmed
- Please specify the percentage of the toe*

12. What type of instruments are used for de-toeing? (*Mark all that apply*)

- Surgical scissors or shears
- Nail clipper
- Hot-blade debeaker
- Trimming machines
- Others. *Please specify the type of instruments used*
- I don't know
- I prefer not to answer

13. Is another procedure (mutilation; e.g., spur removal, beak trimming, de-snooding or vaccination) made during the de-toeing?

- Yes
- If Yes, *please specify the other procedure performed (e.g., spur removal, beak trimming, de-snooding or vaccination)*
- No
- I don't know
- I prefer not to answer

14. Are analgesia/anaesthesia applied?

- Yes, analgesia is applied
- Yes, anaesthesia is applied
- Yes, both
- No
- I don't know
- I prefer not to answer

15. How are analgesia/ anaesthesia applied? (*Mark all that apply*)

- Locally. *Please specify the drug*
- General. *Please specify the drug*
- I don't know
- I prefer not to answer

16. How is the turkey restrained during de-toeing?

*Please specify*

17. Are there any reported cases that led to asphyxia during the restraining?

- Yes
- If Yes, *please specify which percentage*
- No
- I don't know
- I prefer not to answer

18. Are there any reported cases of bone lesions during the restraining?

- Yes
- If Yes, *please specify which percentage*
- No
- I don't know
- I prefer not to answer

19. Are the turkeys kept under observation after the de-toeing?

- Yes

- If Yes, please specify for how long and where they are kept under observation
  - If Yes, please specify what Animal-Based Measures (ABMs) are observed (e.g., behaviour, lesions, etc.)
  - No
  - I don't know
  - I prefer not to answer
20. Are turkeys having difficulties for walking, perching and foraging after the de-toeing?
- Yes
  - If Yes, please specify which difficulties
  - If Yes, please specify the percentage of turkeys having difficulties
  - No
  - I don't know
  - I prefer not to answer
21. When do these difficulties occur? (Mark all that apply)
- Immediately after trimming
  - During the whole life due to deformations/ chronic pain
  - I don't know
  - I prefer not to answer
22. Is de-toeing repeated?
- Yes
  - If Yes, please specify in which cases (e.g., deformation), at which average age, if it is done in toms, hens
  - No
  - I don't know;
  - I prefer not to answer
23. Are measures being implemented in your country to reduce the need of de-toeing?
- Yes
  - If Yes, please specify the measures
  - No
  - I don't know
  - I prefer not to answer
24. Do guidelines exist in your country in relation to enrichment (e.g., use of pecking blocks, perches, strawbales) for avoiding wounds and scratches of turkeys caused by toes?
- Yes
  - If Yes, please specify what type and provide the reference
  - No
  - I don't know
  - I prefer not to answer
25. If some turkeys are not de-toed in your country, how much do you think it is an issue for causing injuries, such as wounds or scratches caused by the toe?
- No issue at all
  - A small issue

## The practice of mutilation in turkeys

- A big issue
- I don't know
- I prefer not to answer

26. Do you have any databases or recording of the prevalence of wounds and scratches?

- Yes
- If Yes, *please specify*
- No
- I don't know
- I prefer not to answer

### A.5.1.2. Turkeys breeders

27. Is de-toeing different between turkey breeders and turkeys kept for meat production?

- Yes
- If Yes, *please specify which aspect asked in questions 1-26 is different*
- No
- I don't know
- I prefer not to answer

### A.6.1. Not performing de-toeing

1. In non-de-toed flocks which husbandry and management practices have been implemented in your country to prevent the need of de-toeing?

*Please specify and provide reference (e.g., regulation, industry guidelines, etc.).*

2. Since when have these management and husbandry practices been implemented?  
*Please specify*

3. Is there a derogation in your country to de-toe turkeys?

- Yes.
- If Yes, *please specify the derogation (how and when it is applied)*
- No
- I do not know
- I prefer not to answer

4. Do guidelines exist in your country in relation to enrichment (e.g., use of pecking blocks, perches, strawbales) for avoiding wounds and scratches of turkeys caused by toes?

- Yes
- If Yes, *please specify the guidelines and provide the reference*
- No
- I don't know
- I prefer not to answer

5. If turkeys are not de-toed in your country, how much do you think it is an issue for causing injuries, such as wounds or scratches caused by the toe?

- No issue at all
- A small issue
- A big issue

## The practice of mutilation in turkeys

- I don't know
  - I prefer not to answer
6. Do you have any databases or recording of the prevalence of wounds and scratches?
- Yes
  - If Yes, *please specify*
  - No
  - I don't know
  - I prefer not to answer

### A.7.1. Performing de-snooding

#### A.7.1.1. Turkeys kept for meat production

The questions in this section (from 1 to 23) are related to the practice of de-snooding in turkeys for meat production. If in your country differences exist for breeders, these differences can be reported in the reply to question 24.

1. In which husbandry system is de-snooding performed in turkeys kept for meat production in your country? (*Mark all that apply*)
  - Free-range
  - Indoor
  - Cover veranda
  - I don't know
  - I prefer not to answer
2. Specify the reasons for de-snooding of turkeys kept for meat production?  
*Please specify*
3. On what percentage of turkey males (toms) is de-snooding conducted in your country?  
*Please specify*
4. Have specific guidelines (e.g., national guidelines, guidelines from hybrid companies, quality schemes etc.) been produced on de-snooding?
  - Yes
  - If Yes, *please specify and provide the reference*
  - No
  - I don't know
  - I prefer not to answer
5. Who does de-snood the turkeys? (*Mark all that apply*)
  - Official veterinarian
  - Veterinarian Practitioner
  - Food Business operator/stockman or delegate
6. Has this person received training for performing the mutilations?
  - Yes
  - If Yes, *please specify which training (certified workshops and others)*
  - No
  - I don't know

## The practice of mutilation in turkeys

- I prefer not to answer
- 7. How many birds are de-snooded per person/day?  
*Please specify*
- 8. At which stage is de-snooding done? (*Mark all that apply*)
  - At the hatchery
  - On farm hatching
  - On the growing farm after hatching
  - I don't know
  - I prefer not to answer
- 9. At which age the de-snooding is done?  
*Please specify it in days*
- 10. Please indicate the approximate length of the snood that is trimmed  
*Please specify the percentage of the snood*
- 11. What type of instruments are used? (*Mark all that apply*)
  - Toenail of the operator
  - Surgical scissors
  - Others. *Please specify the type of instruments used*
  - I don't know
  - I prefer not to answer
- 12. Is another procedure (mutilation; e.g., spur removal, de-toeing, beak trimming or vaccination) made during the de-snooding?
  - Yes
    - If Yes, *please specify the other procedure performed (e.g., spur removal, beak trimming, de-snooding or vaccination)*
  - No
  - I don't know
  - I prefer not to answer
- 13. Are analgesia/ anaesthesia applied?
  - Yes, analgesia is applied
  - Yes, anaesthesia is applied
  - Yes, both are applied
  - No
  - I don't know
  - I prefer not to answer
- 14. How are analgesia/ anaesthesia applied? (*Mark all that apply*)
  - Locally. *Please specify the drug*
  - General. *Please specify the drug*
  - I don't know
  - I prefer not to answer
- 15. How is the turkey restrained during de-snooding?  
*Please specify*
- 16. Are there any reported cases that led to asphyxia during the restraining?

## The practice of mutilation in turkeys

- Yes
  - If Yes, please specify which percentage
  - No
  - I don't know
  - I prefer not to answer
17. Are the turkeys kept under observation after the de-snooding?
- Yes
  - If Yes, please specify for how long and where they are kept under observation
  - If Yes, please specify what Animal-Based Measures (ABMs) are observed (e.g., behaviour, lesions, etc.)
  - No
  - I don't know
  - I prefer not to answer
18. Are turkeys having difficulties after the de-snooding?
- Yes
  - If Yes, please specify which difficulties
  - If Yes, please specify the percentage of turkeys having difficulties
  - No
  - I don't know
  - I prefer not to answer
19. Is de-snooding repeated?
- Yes
  - If Yes, please specify in which cases, at which average age, if it is done in toms
  - No
  - I don't know
  - I prefer not to answer
20. Are measures being implemented in your country to reduce the need for de-snooding?
- Yes,
  - If Yes, please specify the measures
  - No
  - I don't know
  - I prefer not to answer
21. Do guidelines exist in your country in relation to enrichment (e.g., use of pecking blocks, perches, strawbales) for avoiding pecking and fighting of turkeys?
- Yes
  - If Yes, please specify what type and provide the reference
  - No
  - I don't know
  - I prefer not to answer
22. If some turkeys are not de-snooded in your country, how much do you think it is an issue for injurious pecking at the snood?
- No issue at all
  - A small issue

- A big issue
- I don't know
- I prefer not to answer

23. Do you have any databases or recordings of the prevalence of pecking of the snood?

- Yes
- If Yes, *please specify*
- No
- I don't know
- I prefer not to answer

#### A.7.1.2. De-snooding for turkeys breeders

24. Is de-snooding different between turkey breeders and turkeys kept for meat production?

- Yes
- If Yes, *please specify which aspect asked in questions 1-23 is different*
- No
- I don't know
- I prefer not to answer

#### A.8.1. Not performing de-snooding

1. In non-de-snooded flocks, which husbandry and management practices have been implemented in your country to prevent the need of de-snooding?

*Please specify and provide reference (e.g., regulation, industry guidelines, etc.).*

2. Since when have these management and husbandry practices been implemented?  
*Please specify*

3. Is there a derogation in your country to de-snood turkeys?

- Yes.
- If Yes, *please specify the derogation (how and when it is applied)*
- No
- I do not know
- I prefer not to answer

4. Do guidelines exist in your country in relation to enrichment (e.g., use of pecking blocks, perches, strawbales, etc.) for avoiding pecking at the snood of the turkeys and fighting?

- Yes
- If Yes, *please specify the guidelines and provide the reference*
- No
- I don't know
- I prefer not to answer

5. If turkeys are not de-snooded in your country, how much do you think it is an issue for pecking of the snood?

- No issue at all
- A small issue
- A big issue



## The practice of mutilation in turkeys

- I don't know
  - I prefer not to answer
6. Do you have any databases or recording of the prevalence of pecking at the snood?
- Yes
  - If Yes, *please specify*
  - No
  - I don't know
  - I prefer not to answer