

Meeting of the sub-group on poultry

Eighth meeting, 07 November 2022

(Videoconference)

– **MINUTES** –

Attendance

Independent expert	Leonardo James Vinco Evangelia N. Sossidou
---------------------------	---

Civil society organisations	Eurogroup for animals (EfA)
------------------------------------	-----------------------------

Business and professional organisations	AVEC COPA FVE
--	---------------------

Member States	Czech Republic Denmark Spain Norway
----------------------	--

European Commission	SANTE G3
----------------------------	----------

Guest(s)	Bas Rodenburg Rick van Emous
-----------------	---------------------------------

Topic: 'Mutilations; space allowance'

1. Welcome to the meeting and introduction of guests

The Chair welcomed all participants and introduced the invited guests by presenting their background and relevant experience in relation to the work of the subgroup.

2. Context of the topic by the Commission

The Chair explained the context and summarised the requirements regarding mutilations and space allowance for poultry according to Directive 98/58/EC (general obligations), Directive 1999/74/EC (laying hens) and Directive 2007/43/EC (broilers).

3. Presentation 'Banning mutilations in laying hens' (guest)

The presenter showed the recent progress on feather pecking behavior and perspectives to avoid beak trimming in laying hens. Feather pecking is a problem in all housing systems, but most difficult to control in cage-free housing systems with large flock size. The EU egg production is moving towards cage-free systems. Experience with management of hens in non-cage systems is increasing, leading to improved performance and reduced mortality. Additionally, percentage of hens with intact beaks is expected to increase. In this context, attention is needed throughout breeding and production chain to minimize the risk of feather pecking.

Beak trimming by removing the tip of upper beak is used to prevent damage caused by feather pecking. Beak trimming is considered a form of 'insurance' to limit negative consequences if injurious pecking develops. However, this practice causes pain for the birds, and it is under debate, as it is considered not a real solution. Beak trimming was prohibited in The Netherlands in 2018.

To transitioning to intact beaks, farmers could start with a trimmed flock after transition and switch to intact beaks when they have sufficient experience with the system or transition to intact beaks directly.

Caged systems remain the most common system used to rear laying hens in all continents. A large study in laying hens on the relationship between housing system and mortality compared mortality in conventional cages, furnished cages and cage-free systems and concluded that mortality decreases with increasing farmer experience, and no difference in mortality was shown in countries with experience with cage-free systems.

The main risk factors identified for feather pecking (based on the experience in keeping hens with intact beaks in organic production):

1. High stocking density during rearing (weeks 1-4)
2. Absence of litter during rearing (weeks 1-4)
3. Absence of daylight (weeks 7-17)
4. Feather pecking during rearing increase the risk of feather pecking during laying (90% flocks)

For transition towards intact beaks, it is important the farmer exchange of knowledge with veterinarians, feed, rearing, and breeding companies, housing manufacturer, etc. Monitoring plumage condition may be used as an indicator in flocks with intact beaks. Natural ways to blunt beaks may also be considered as alternatives to beak trimming. Those natural methods could include abrasive pecking blocks, specific feeders with abrasive surface or pecking peaks during rearing (week 6-7).

There is also a genetic variation in the propensity to develop feather pecking. Birds with a stronger pecking motivation or hyperactive birds seem more at risk to develop feather pecking. Breeders use sister groups to select against feather pecking: only families that show low mortality are selected for breeding.

All stages of the production play an important role in the prevention of feather pecking, and cannibalism:

1. Parent stock: effect of stress in parents
When parent stocks show high feather damage, and high basal cortisol, offspring show high severe feather pecking in week 1.

2. Rearing flock: 70% of flocks with damage at 5 weeks had problems with litter supply during rearing.
3. Laying flock: the main risk factors of feather damage in laying flocks at 40 weeks of age are:
 1. Rearing period
 - High level of severe feather pecking at 5 weeks of age
 - High fear of humans (both hybrids)
 2. Laying period
 - Floor housing rather than aviary
 - Large group size
 - High fear of humans
 - No modified management

For a successful management of cage-free flocks the following elements should be taken into account:

- Genetics: white and brown strains show large differences. The most appropriate strain should be chosen.
- Rearing period is crucial, particularly:
 - Litter supply: provide chick paper.
 - Fear of humans – stress sensitivity (avoid noise and stressful routines).
 - Match between rearing and laying environment.
- Laying period:
 - Laying hen-farmer relationship is important.
 - Early detection of problems: in case of issue, consider modified management - pecking blocks, alfalfa bales.
 - Litter supply.
 - Fear of humans – stress sensitivity.

The pilot project 'Best Practice Hens' (www.bestpracticehens.eu) to support the transition cage-free systems for laying hens (2021-2023) was presented. The project aimed describing best practices for the management of laying hens in cage-free systems based on experiences from EU countries with a high percentage of cage-free housing (NL, GE, FR, DE). The purpose is to make knowledge and experience available to countries where most hens are still in cages and support the transition to cage-free systems.

Conclusion

- The number of countries that keeps hens with intact beaks is increasing (recent transitions in NL, DE).
- Keeping hens with intact beaks is feasible. Farmers need to be guided/advised, especially during the transition.
- Tools such as plumage condition scoring may be useful to monitor flocks. Management changes should be considered: provide extra enrichment, roughage, pecking blocks if pecking increases.
- Breeding, parent stock farms, rearing farms and laying hen farms all play an important role in the prevention of feather pecking.

4. Presentation 'Mutilations in broiler (and layer) breeders' (guest - Wageningen)

The presenter described the situation regarding mutilations in broiler breeders in The Netherlands in the past. Beak trimming broiler breeders was a standard practice till 1 January 2019 in The Netherlands. Beak trimming is performed in female and male broiler breeders to prevent feather and skin damage due to injurious pecking behaviour. A fact-finding mission took place in Poland and the UK in 2011, with the goal to gather information and measures damage (pecking) prevention. The conclusion of that fact finding mission showed an impact in pecking prevention of stocking density 10% lower, higher bedding depth, low light intensity, with a lower mortality and comparable egg production.

The presenter showed the conclusions of a pilot study on a commercial broiler breeder farm. It was found that females (Ross 308) with intact beaks had better performance during the rearing period than beak-trimmed females. This was because there was no negative effect on feed and water intake during the first days on the rearing farm, resulting in improved growth and uniformity and less mortality in the non-beak-trimmed as compared to the beak-trimmed flocks. Additionally, in general there was no negative effect of non-beak trimming on the feather cover in flocks with intact beaks.

The presenter also showed experiences with toe and comb clipping in broiler breeders in Scandinavia through information gathered during interviews to some companies and a fact-finding mission. Toe clipping is carried out by hot-blade treatment to prevent feather and skin damage. It was explained that during the fact-finding mission it was found that toe clipping is applied to decrease mortality in males, decrease use of antibiotic (leg health) and improve male quality (BW uniformity, leg health). However, toe clipping is less and less used in Scandinavia. Impacts of toe clipping are under research.

Conclusions:

- Huge steps have been made to stop mutilations.
- Stopping regular beak trimming to females and males is possible.
- Toe clipping male is under research.
- Stopping beak trimming to layer breeders is not possible.
- Stopping comb clipping in layer breeder males is not possible.

5. Presentation 'Space allowance' (Eurogroup for Animals)

The presenter described the negative effects of lack of space to poultry. These effects may be:

- feather pecking,
- poor litter quality and subsequent contact dermatitis,
- inability to forage and dust bathe,
- ease of movement impaired, decreased walking ability,
- performance of certain behaviours impaired (e.g. exploration, dust bathing, comfort behaviour),
- disturbed resting behaviour,
- risk of heat stress,
- stress, fear, aggression, inability to escape aggressive conspecifics and
- fewer possibilities for functional areas.

In addition to space allowance, other parameters like the design of the space, climate control, feed, welfare monitoring may have an influence on the welfare of poultry.

However, only increasing space allowance cannot solve all welfare issues, and welfare cannot be optimal without enough space allowance.

Broilers

The presenter gave some examples of minimum space needed to allow broilers to express different behaviours according to literature (e.g., 27.2 Kg/m² for foraging and exploration, 20,2 kg/m² for preening, 12,4 kg/m² for wing/leg stretch). Stocking densities of 25-30 kg/m² have welfare benefits (gait score, FPD, heat stress, ...)

The EU legal requirements allow stock densities considered by the presenter too high. Currently, stock densities used for broiler reared for meat in conventional systems represent 34% for densities up to 33kg/m², 44% between 34-39 kg/m² and 26% between 39-42kg/m². Stock densities in organic production are 21kg/m².

Using of higher stocking density at young age by having temporary (e.g. first x days of life) more birds/m² could have benefits for energy use (e.g. local heating sources). Described potential risks of temporary higher stocking density are higher mortality, poorer gait score, more foot pad and skin lesions and fewer space-demanding behaviours (running, walking, sitting + pecking). However, effects on welfare must be further studied.

Higher stocking density at young age is not the same as thinning. Thinning is a risk factor for welfare, and can cause disease/higher antibiotics use, overcrowding, feed withdrawal, fluctuating temperatures, and stress/disturbance. Thinning should be avoided.

There is little research on vertical space allowance broilers. Platforms are used, especially by slower growers. Cage systems such as patio provide insufficient vertical space.

Laying hens

The presenter showed examples of space requirements of laying hens according to literature (e.g., 1.199 cm²/hen for foraging, 643 cm²/hen for egg laying, 18 cm for perching). Laying hens legislation and welfare schemes provide requirements between 6 and 9 hens/m². Best practices to reduce the risk of feather pecking recommend <9 hens/m².

Multiple tiers allow vertical space allowance. Hens prefer perches >60 cm high and ramps are beneficial for less keel and bone damage.

Pullets, parent stocks, turkeys, ducks, geese and quail

There is no basic EU legislation for these categories of birds.

For pullets only the organic legislation provide a requirement of maximum 21 kg/m². Best practice for hens recommend 10-15 birds/m² for white hybrids, and 9-13 birds/m² for brown hybrids.

The common densities for broiler breeders are 7-10 females/m² and 4-8 males/m² for rearing, and 5-8.5 birds/m² for production. Lower stocking densities (4.75 vs. 8 birds/m²) lead to more courtship behaviour and complete matings, fewer forced matings and less feather damage.

Marketing standards for turkeys are maximum 25 kg/m² (extensive indoor) + 4m² outdoor (free range). Most current practices use higher stock densities (35-58 kg/m²). Based on the available scientific literature and economic considerations, a maximum density for fattening turkeys of 36-40 kg live weight/m² is adequate according to the presenter.

For quail, poorer fertility, productivity, immune response and welfare are observed when housed at 143 cm²/bird compared with 200 cm²/bird.

For all species, additional space allowance lead to higher costs/animal but could be compensated by a higher production/animal. Increased space allowance has also benefits in workers due to more pleasant work conditions. A negative consequence of more space is a dryer litter which implies more particulate matter, but innovations such as ionisation and regular removal of faeces could mitigate this issue.

Conclusions

- Lowering stocking densities has animal welfare benefits.
- Stocking densities for broilers and laying hens should be lowered:
 - Broilers: 25-30 kg/m²
 - Laying hens: 7 hens/m²
- Maximum stocking densities for other animal categories should be specified.
- Design of the space matters:
 - E.g., addition of platforms, height of perches
 - E.g., smaller but well-designed free-range area, vs. large open free range

6. Discussion:

The members of the subgroup debated on the possibility of banning beak trimming possible and other potential mutilations used in poultry that should/could be continued and under which conditions. Discussions took place on space allowance/stocking density for the different poultry categories and species. The subgroup also discussed about possible incentives to encourage farmers to keep intact laying hens (and other poultry) and to provide more space to the animals.

The subgroup continued the discussion on the mandatory/ voluntary animal based indicators topic following the sixth subgroup meeting.

Next meetings

- **9th meeting: Tuesday, 1st December: (9:00-12:30)**

Topics:

- Requirements for Standard Operational Procedures (SOP);
- Existing EU legal provisions relevant to poultry welfare

- **10th meeting: Monday, 30 January (09:00-12:30)**

Topic:

- Existing EU legal provisions relevant to poultry welfare
- **12th meeting of the EU Platform on Animal Welfare on Monday 5 December 2022** from 14:00 to 18:00 (Brussels time) and on **Tuesday 6 December** from 9:30 to 17:40 (Brussels time). Subgroup members can join virtually. The work of the subgroup on poultry will be presented. Agenda and links will be available on the Commission website and in the Digital Tool.