

PVSGEU response to EFSA Scientific opinion on Welfare of ducks, geese and quail on farm.

The Poultry Veterinary Study Group of the EU (PVSGEU) welcomes the opportunity to respond to the EFSA Scientific Opinion on the above topic.

The PVSG is a formally constituted group of about 90 European specialised poultry veterinarians, with practical responsibility for the health, welfare, production and food safety aspects of most European poultry production. PVSG has existed for over 50 years and the members are mostly working as private practitioners or are sometimes working for a company (breeding companies, integrations, hatcheries, pharmaceutical companies). Government veterinarians are not eligible for membership. The following 23 countries are currently represented in the PVSG: Austria, Belgium, Bulgaria, Cyprus, Denmark, Estonia Germany, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Latvia, Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland.

Background:

The Commission asked EFSA to review welfare of ducks, geese and quail on farm to provide a scientific basis for formulation of updated welfare legislation in line with its Farm to Fork strategy. Furthermore, a successful EU citizens' initiative "Ban the cage age" was published by the Commission in 2020 banning the use of cages for ducks, geese and quails. Currently there is no specific legislation that relates to welfare of ducks, geese and quail although there are Recommendations of Council of Europe that relate to domestic ducks, Muscovy ducks and hybrids of Muscovy and domestic ducks (Mule ducks) and domestic geese and their crossbreds. These recommendations of the Council of Europe are based on scientific data that is over 20 years old.

Summary:

This EFSA report is a comprehensive review of the natural history and current husbandry systems used to rear domestic ducks, geese and quails in the EU and should be welcomed as a reference document for producers, legislators and consumers. The report focuses on ducks and geese reared for meat production and both meat and egg laying quail. It also considers the welfare considerations for breeding birds of all species but does not consider those used for egg production for human consumption. The EFSA opinion does not consider the specific issues related to force feeding for foie gras production or the live harvesting of feathers, both which are major contentious issues for the welfare of waterfowl.

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Indeed, many EU countries have already banned such procedures on welfare grounds. Further consideration of the adverse welfare impact of these practices is therefore warranted. At the outset the report states that further research is needed to fill knowledge gaps in many areas but then proceeds to make several significant recommendations. The recommendations made on space allowance per bird, as with previous EFSA recommendations, are based on semi quantitative model and PVSGEU are firmly of the opinion that further research is required in all species before the EFSA space allowance recommendations are implemented to establish that they would make significant improvements on welfare outcomes compared to current stocking densities. Furthermore, PVSGEU believe these proposed space allowances are unrealistic and impractical for EU producers to implement and will have serious practical and economic implications for the future of EU production of these species, and therefore PVSGEU believe these proposals on stocking density should NOT be implemented without further scientific evidence to support their implementation. If these recommendations are implemented will be to export our poultry meat production to third countries which ultimately will not improve the welfare of the birds providing the meat, we eat in Europe.

Introduction:

EFSA have produced a report on the welfare of ducks, geese and quails. The report contains a comprehensive review of the natural biology of these species and the current husbandry and management systems employed in the EU. The report acknowledges that further research is required in many areas related to these species but nevertheless presents recommendations they consider may improve welfare. However, the report does not consider the wider societal, environmental and animal health implications of these recommendations. This is somewhat surprising as the rationale for this review is in part driven by the EU strategy for sustainable food production, the Green Deal and Farm to Fork. Furthermore, the report does not consider in detail the most important factor in improving animal welfare which applies across all livestock species, which is stockmanship and the quality and capability of husbandry and management by the farmer/animal keeper. Implementation of these recommendations will have far reaching implications for EU food production, food security and competitiveness. It would almost certainly result in animal protein production being exported to third countries will NOT result in overall improvements in animal welfare as those countries will continue to be able to rear animals to the standards accepted in those countries.

Space allowance:

EFSA highlight that stocking density i.e., floor space per bird is a major hazard as it restricts movement, and this has welfare consequences for the birds. EFSA recommendations for floor space is based on their semi quantitative model which assesses how much room the birds require to undertake a range of normal activities.

Domestic Ducks:

EFSA recommend that the floor area required is 4139 cm²/bird equivalent to 2.42 birds/m², i.e., 7.2 kg/m² (3 kg bird) on floor. This is considerably lower stocking density than is currently used by EU producers. The published research quoted by EFSA in the report did not test stocking densities as low as the recommended 2.42 birds/m² but has shown that footpad dermatitis (a key welfare assessment measure) was not significantly increased in birds stocked at 9 birds/m² compared to 5 birds/m² (Xie *et al* 2014). De Buisonje (2001) demonstrated increased feather damage with increasing stocking

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densities but again did not test stocking densities as low as recommended by EFSA. PVSGEU believe further research is required to demonstrate that lowering stocking density to the level recommended by EFSA (since this is based on a semiquantitative model) should be undertaken to confirm that this will significantly increase bird welfare.

EFSA suggests that ducks should be supplied with 219 cm²/bird as open water. PVSGEU has concerns about the provision of open water to housed ducks. When ducks are provided with open water, they create a lot of spillages, which can impact on litter quality in the houses, predisposing to pododermatitis (a welfare compromise). Furthermore, water is a valuable environmental resource, which with climate change is becoming scarcer in parts of Europe. Providing waterfowl with a source of water that allows them to immerse their heads allows the waterfowl to maintain clean eyes, nostrils and plumage. Therefore, PVSGEU consider that the decision to provide open water for waterfowl should remain with the producer depending on their own particular management system, assessment of the suitability of that system being through animal-based welfare outcomes such as eye, nostril, plumage condition and pododermatitis levels. EFSA suggest that producers should provide separate drinking water and bathing water. PVSGEU believe this is unrealistic as waterfowl are not going to differentiate these two water sources.

EFSA suggest a minimum height of enclosures for ducks should be 66cm. PVSGEU agree with this proposal.

Muscovy/mule ducks:

EFSA recommend that the floor area required is 4061 cm²/bird equivalent to 2.46 birds/m² i.e. 10.8 kg/m² (4.4 kg bird) on floor. This is considerably lower stocking density than is currently used by EU producers which is 4-6.5 birds/m² for male birds and 7.8-11.0 birds/m² for females in growing birds greater than 6 weeks of age. Again, there is scant published research on effects of stocking density on welfare outcomes in Muscovy and mule ducks. Most published research examined the effects of stocking density on growth rate rather than welfare. PVSGEU believe further research is required to demonstrate a real impact on welfare measures before EFSA recommendations on stocking density are implemented.

EFSA suggests that Muscovy and mule ducks should be supplied with 187 cm²/bird as open water. PVSGEU has concerns about the provision of open water to housed ducks. When ducks are provided with open water, they create a lot of spillages which can impact on litter quality in the houses, predisposing to pododermatitis (a welfare compromise). Furthermore, water is a valuable environmental resource, which with climate change is becoming scarcer in parts of Europe. Providing waterfowl with a source of water that allows them to immerse their heads allows the waterfowl to maintain clean eyes, nostrils and plumage. Therefore, PVSGEU consider that the decision to provide open water for waterfowl should remain with the producer depending on their own particular management system, assessment of the suitability of that system being through animal-based welfare outcomes such as eye, nostril, plumage condition and pododermatitis levels.

EFSA recommend that a minimum height of enclosures for Muscovy and mules ducks should be 96 cm. PVSGEU agree with this proposal.

Domestic geese:

EFSA recommend that the floor area required is 7776 cm²/bird equivalent to 1.29 birds/m² i.e. 8.6 kg/m² (6.7 kg bird) on floor. This is considerably lower stocking density than is currently used by EU producers which is 3 birds/m² for indoor grown birds and 4-5 birds/m² for indoor birds which have access to outside areas. Again, there is scant published research on effects of stocking density on

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welfare outcomes in geese and much of the work is confounded by group size. Therefore, PVSGEU believe further research is required to demonstrate a real impact on welfare measures before EFSA recommendations are implemented.

EFSA suggests that Geese should be supplied with 1166 cm²/bird as open water. PVSGEU has significant concerns about the provision of open water to housed geese. When geese (or waterfowl) are provided with open water they create a lot of spillages which can impact on litter quality in the houses, predisposing to pododermatitis (a welfare compromise). Furthermore, water is a valuable environmental resource, which with climate change is becoming scarcer in parts of Europe. Providing waterfowl with a source of water that allows them to immerse their heads allows the waterfowl to maintain clean eyes, nostrils and plumage. Therefore, PVSGEU consider that the decision to provide open water for waterfowl should remain with the producer depending on their own particular management system, assessment of the suitability of that system being through animal-based welfare outcomes such as eye, nostril, plumage condition and pododermatitis levels.

EFSA recommend that a minimum height of enclosures for Geese should be 127 cm. PVSGEU agree with this proposal.

Japanese quail:

EFSA recommend that the floor area required is $581 \text{cm}^2/\text{bird}$ equivalent to 17.2 birds/m^2 i.e. 5.2 kg/m^2 (0.31 kg bird) on floor. This is considerably lower stocking density than is currently used by EU producers which is 88 birds/m² for meat birds and 79 birds/m² for laying birds. All the published research on the effects of stocking density on quail production looked at production factors not welfare outcomes. The review by El Sabry *et al* (2022) suggest that the best balance between economics and welfare was achieved by providing 100-150 cm²/bird for meat quail and 200-230 cm²/bird for laying quail, however they do not specifically state which welfare parameters are impacted by this increased stocking density. PVSGEU believe further research is required to demonstrate a real impact on welfare measures before EFSA recommendations in this area are implemented.

EFSA suggests that quail should be supplied with 32 cm²/bird for dust bathing, and that enclosures should have a minimum length of 2 metres and minimum height of 150 cm to allow for flight and jumping. PVSGEU have some concerns regarding this space allowance as increased space allowance to fly can result in greater impact injuries to birds. As with recommendations on space allowance for the other species in this report, PVSGEU believe further research is required to establish the true welfare outcomes before these recommendations are implemented.

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Aspects for all species:

Group Size for all species:

No science is available to establish recommendations on group size, however since none of the species naturally express solitary behaviour PVSGEU agrees that minimum group size should be greater than 1.

Floor quality for all species:

EFSA recommends that floors should be solid and covered with litter and there should be adequate drainage around the drinkers. It is well recognised that waterfowl will play with water, and this can result in significant water spillage especially in the areas of drinkers. Therefore, PVSGEU believe it is acceptable to place drinkers for waterfowl over slatted areas or perforated flooring to improve water drainage thus preserving litter quality in the house.

Nesting for all species:

EFSA state that the current nest provisions for all species fulfil the welfare needs of the female birds. PVSGEU agrees with this but note that it is important to provide a good nesting material to enable birds to exhibit nesting behaviour.

Environmental enrichment for all species:

Provision of open water as an environmental enrichment for waterfowl:

The EFSA opinion reviewed extensive literature around the benefits of providing open water to waterfowl. Illustrations of a range of open water systems employed by the industry across Europe were provided. These systems provided different levels of access from simple beak dipping, full head immersion to whole body immersion. Several papers concluded that there is strong motivation for waterfowl to access open water systems when provided, but the scientific evidence reviewed provided contradictory benefits with some papers concluding open water access improved Animal Based Measures(ABM) such as eye and nostril cleanliness and better feather condition and cleanliness and other papers indicating no improvement in the ABM and in fact deterioration due to poor litter conditions and increased ammonia production and pododermatitis levels. PVSGEU accepts that there is strong motivation for waterfowl to access open water are highly dependent on housing system and management capabilities of the stock person attending the animals. Therefore, the decision to provide open water must be dependent on these factors.

Friable litter for all housed species:

PVSGEU consider all species should be supplied with friable litter as this provides a comfortable environment for the birds and additional environmental enrichment. Several of the scientific papers reviewed confirmed that waterfowl will use friable litter to allow them to exhibit sham dabbing in the absence of open water provision. However, where waterfowl are provided with open water PVSGEU

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strongly recommend that perforated or slatted flooring should be provided in the drinking area to support the maintenance of friable dry litter in other areas of the house.

Dust bathing for quail:

PVSGEU agree that dust bathing provisions should be provided for quail, however provision of dry friable litter may be sufficient to fulfil this requirement.

Outdoor access:

Outdoor can have advantages for welfare in all species however this also presents management challenges with relation to predation, biosecurity risk as a result of contact with wild birds and rodents, adverse weather conditions, maintenance of range quality and loss of range vegetation. Deterioration of range quality and poaching of land can result in water and faeces accumulation which then become attractive to both vermin and wild birds impacting on biosecurity. Provision of outdoor access for quail would require cover netting to prevent birds' escape. Netting can be problematic as birds fly up into the netting and can get caught up creating welfare issues. PVSGEU consider that providing outdoor access can have some benefits but do not believe it should be a requirement in all circumstances due to the potential negative consequences mentioned above. This is especially relevant considering the current situation across Europe and globally regarding risks of introduction of avian influenza into commercial premises from infected wild birds. Therefore, outdoor access should be a decision made by the producer depending on their management system and veterinary risk assessment.

Covered veranda systems:

EFSA as in previous reports (Welfare of broilers on farm and Welfare of layers on farm) have recommended the provision of covered verandas as an alternative to providing access to outside range. PVSGEU consider that provision of covered verandas can have a negative consequence for the management of the house environment as the ventilation of controlled environment housing is dependent on control of air flow through and around the house. Additional openings to allow access to verandas can impact on the ventilation and thus the internal house environment. PVSGEU therefore conclude that provision of covered verandas should be a decision for the farm and not a requirement in legislation.

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Conclusions:

In conclusion, PVSGEU considers the EFSA report to be an excellent and comprehensive review of the European systems for keeping domestic ducks, Muscovy and mule ducks, geese and quails. The report presents conclusions and recommendations to improve welfare in these species, however the report concludes there are many gaps in research and the scientific knowledge of welfare requirements in these species. Therefore, whilst PVSGEU agrees with some of the proposals in this report it believes that before others are implemented further research must be undertaken to ensure that any recommendation will truly deliver welfare benefits. It is also important that before any recommendations are implemented the wider societal, environmental and animal health implications are also considered as welfare cannot be considered in isolation.

Further consideration of the potential adverse welfare impact of the force feeding of waterfowl for foie gras production and the live harvesting of feathers from any waterfowl is warranted.

Finally, the report does not consider in detail the most important factor in improving animal welfare which applies across all livestock species, which is stockmanship and the quality and capability of the farmer/animal keeper.

PVSGEU is a group of specialist veterinary surgeons serving the poultry sector in Europe. We are committed to a One Health Strategy as has been evidenced by our drive to reduce antimicrobial use in poultry production across Europe. However, a major component of One Health is a nutritious, safe diet and poultry products are a major contributor to a healthy diet. We believe it is imperative that this should be available to all world citizens without negatively impacting on environmental health. Some of the recommendations in the EFSA report are directly contrary to environmental sustainability.

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