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Director

Response to the Public Consultation on the “Proposed Draft Australian Animal Welfare Standards and Guidelines for Poultry”.

I am a veterinarian with 37 years’ practical experience in health and management care of commercial poultry in Australia. I have worked within pharmaceutical companies supporting the poultry industry and directly within Australia’s two largest meat chicken companies, one of which has also been the largest supplier of egg layer hens for the egg industry.

Since 2003 I have operated a private veterinary consultancy (Zootechny Pty Ltd) providing veterinary advice and service to Australian chicken meat, egg layer and duck producing companies and have employed three other veterinarians providing this service.

I am currently an Associate Professor in Poultry Health in the Sydney School of Veterinary Science within the Faculty of Science of the University of Sydney. As such I provide teaching for veterinary students in poultry health and production. I am also the Director of the Poultry Research Foundation within the University of Sydney. Within our research areas our poultry research group of academics has been strongly involved in poultry welfare research, including funded studies on leg strength of meat chickens related to incubation variables, management to control the broiler ascites syndrome, understanding the factors behind injurious feather pecking and cannibalism in layer hens, surveys on free range production systems and evaluating the risk of the introduction of Avian Influenza into commercial chicken flocks with special emphasis on the risks in free range operations.

My comments here are not made on behalf of the University of Sydney nor do they necessarily represent the University’s views.

I believe my experience and close association with poultry farming systems in all their iterations (conventional caged layers, barn layers, free range layers, conventional meat chickens and free range meat chicken systems) puts me in a rare position to offer some practical, well-informed comments on the draft standards and guidelines.

Although I have links with the poultry industry, my role as a veterinarian, both practising and university-based, allows me to comment objectively, with no conflicts of interest. In formulating the comments below, I have sought to balance the interests of the birds, particularly as relates to health and biosecurity issues, with the interests of the community and the poultry industry.

I would be pleased to assist the consultations with further advice if that would be of helpful.

General Comments on the Draft Standards and Guidelines

I understand that it is the intention of the poultry industry to assume responsibility for the standards encompassed by the final document. The Standards and Guidelines (S&Gs) define requirements which must be met under law. They are outcomes-based and are generally seen as desirable by the industry at large. It is the outcomes that are required and the method(s) of reaching these are not necessarily proscribed. In this context it is important that the Standards are unambiguous and do not leave things open to variations in judgement. If the final S&Gs are ambiguous we risk inconsistent application and unnecessary litigation. The need for “clear, essential and verifiable requirements” is specified in the document. This needs to translate to the actual wording of the Standards. Where Standards appear likely to be difficult to assess, or are vague, I have noted this in my response.

After the consultation process it is intended that the S&Gs are endorsed by AGSOC and AGMIN, but thereafter it will be for each state and territory to implement as they see fit (p7). This introduces a complication and weakness in the implementation process, with the likelihood that differences in legislation and process will continue to exist between jurisdictions, leading to inconsistencies, inequalities and uncertainties between production areas. Every effort must be made to harmonize the requirements across the Commonwealth.

Part A – General S&Gs for all species of poultry.

1. Responsibilities

This section should encourage the development of appropriate courses by tertiary education providers to help create means for people to attain competencies in the required fields.

2. Feed and Water

SA2.2 I note that skip-a-day feeding is recognized as an essential tool in some circumstances in poultry (breeder) rearing and that this is allowed to continue under the S&Gs.

3. Risk management

SA3.1 requires reasonable actions to protect poultry against “predation”. This is subsequently mentioned under SA3.5 in relation to the provision of shelter that may minimize predation. While predation is a minor cause of bird loss under Australian free range operations, it does occur. Protection against ground dwelling predators is reasonably well accomplished by good fencing, which is impenetrable by burrowing underneath or climbing across. However, this approach is not effective for bird predators (eagles, hawks and particularly, crows). In this context “reasonable” protection against bird predators needs a more precise definition.

SA3.5 requires access to shelter from adverse weather. One issue that requires further consideration here is the application of this Standard to caravan-style free range layer facilities, which **do not provide feed or water inside the structure**. Under caravan-style facilities birds can access neither feed nor water unless they go outside into the prevailing conditions (whether this is pleasant weather, extreme heat, rain, high winds, cold or even snow).

GA3.11 covers biosecurity concerns and mentions aerosols as a pathogen transmission method that should be addressed. Apart from HEPA filtering of incoming air, preventing aerosol transmission of poultry pathogens seems an impossibility in a commercial or non-quarantine facility framework. The major poultry pathogens transmitted by this method (e.g. Marek’s Disease, Infectious Bronchitis, Infectious Laryngotracheitis) have proven impossible to exclude by biosecurity alone and must rely on vaccination to provide protection.

GA3.15 suggests that internal and external parasites should be managed. This is repeated under GA5.1, GA5.2 and GA5.5. This raises problems with some organisms, poultry tapeworms in particular. These have a large number of species of parasite which can vary in pathogenicity between mild and severe. They have intermediate hosts as methods of transmission. They are only problematic in extensive management systems (particularly in free range). There are no registered products available in Australia for their treatment or control. These cannot be treated effectively at present and the birds must be left to suffer the infections without help. This is a more significant problem in “organic” production systems where no medicinal treatment is allowed at all and even intestinal roundworms and external parasites cannot be treated. Despite alternative claims, apple cider vinegar is not effective against worms. This is a perpetually difficult area of concern with extensive systems.

4. Facilities

SA4.1 is a vague statement open to judgemental assessment without some guidance as to what construction and facilities would meet a “reasonable” action.

5. Outdoor Management

SA5.1 requires a definition, or at least some guidance as to what constitutes “adequate” feathering. As drafted the Standard would be open to judgemental assessment and would be difficult to verify. Perhaps this should be moved under a Guideline?

SA5.4 requires that actions are taken to minimise access by wild birds to the birds’ feed and inking water. This, as it is a Standard, essentially **will make the “caravan-style” free range farms illegal** as feed and water are supplied ONLY outside the structure in that style of facility. These types of facilities do not provide feed and water inside the structure. Feed is supplied in various styles of hopper feeders placed outside to allow easy access by the chickens. It is yet to be seen how these wild birds can be prevented or discouraged in these facilities, and I anticipate that this will be very difficult to achieve in a practical, cost-effective, manner.

GA5.5 notes that the presence of a disease organism in the outdoor area poses a risk to the welfare of the poultry. Internal parasites and their intermediate hosts are guaranteed to be present in range areas and are difficult to treat and in some cases unable to be treated (see comments under GA3.15).

7. Temperature and Ventilation

SA7.3 requires regular ammonia monitoring but does not provide an adequate mechanism by which non-compliance will be monitored and reported.

8. Litter Management

SA8.3 refers to “excessive” caking (caking means “undesirable compaction of the surface of the litter in the Glossary), dustiness or wetness that could affect poultry welfare. These terms are undefined to the extent of what “**excessive**” means and leaves the assessment open to judgement. How the “impact” on the welfare of the poultry is determined as a result is also open to argument. I find this description extremely vague and the interpretation open to wide variation. As a Standard, this requirement leaves the “person in charge” liable to prosecution. The Standard needs to be defined more precisely. Obviously, being prescriptive here is difficult and perhaps this should be more appropriately covered under a Guideline.

9. Handling and husbandry

SA9.12 requires pain relief to be used during surgical procedures. Practices like desnooding, dubbing, despurring, web marking and toe trimming practised on day old hatchlings are covered in SA9.9 through SA9.11 which could be construed to constitute “surgical procedures”. Are these defined procedures excluded under SA9.12? If so, this should be specified clearly.

SA9.13 prohibits plucking of live poultry. Does this include the removal of some feathers near the brachial or jugular veins to facilitate venipuncture for blood sample collection or intravenous injection? This is a common veterinary procedure during diagnostic testing.

GA9.9 recommends maintaining sex ratios in breeders to ensure there is not “excessive” aggression. This is a very variable behaviour and difficult to assess. It is an important factor for consideration, however, as incorrect ratios can lead to injury and mortality as well as depressing fertility and egg production. An unambiguous definition of “excessive” should be included in the Glossary.

GA9.14 – “therapeutic” beak trimming suggests that this is done only as a treatment where a flock is experiencing a problem. In most cases it is performed preventatively for flocks destined for operations with a known risk for injurious feather pecking or cannibalism. To my knowledge, this would include nearly all free range layer farms. Injurious feather pecking and cannibalism can occur in any management system. It is more easily managed in cages (mainly by control of light intensity) but it is difficult in the more extensive systems. Beak trimming is seldom used in the field once an outbreak of injurious pecking occurs due to the handling and impact on the adult birds, hence the use of beak trimming other than at day old is restricted to mid rearing (10-11 weeks) as a prevention. Clarification as to what “therapeutic beak trimming” refers to in this guideline is needed.

10. Humane killing

GA10.2 lists the acceptable methods for euthanizing poultry but the list does not include an overdose of anaesthetic (such as pentobarbitone by injection). This is the preferred method used by private veterinarians if euthanizing poultry brought into their practice. It is also necessary in many research institutions where it is essential for the integrity of some tissues needing specialized collection (e.g. gut segments and ileal contents) which can be destroyed rapidly with other methods. This is a gentle and rapid method if performed by an experienced professional. It should be included in the list of approved methods.

GA10.5 prohibits crushing of the neck during euthanasia but the RSPCA approves of euthanasia by pressing the neck against a sharp object. This essentially is a crushing technique. Will this technique be banned under this document? Spinning of the bird by the head is NOT a humane method in my opinion and should not occur as noted in this guideline.

11. Slaughter establishments

SA11.1 uses the term “minimises” stress. This is a relative term which is difficult to describe and will inevitably lead to judgemental assessment.

SA11.8 Birds which enter the scald tank before death are obvious after plucking and are commonly called “red birds” due to the hyperaemia in the skin as a result of scalding with an intact blood circulation. Poultry abattoirs make major efforts to avoid these occurrences but a zero tolerance may be difficult to achieve completely. This problem occurs after a bird is stunned but misses neck cutting (including the back up neck cutter specifically positioned to avoid the problem) and has not bled out. The bird has been stunned and is unconscious when entering the scald tank but may still

have a heartbeat. It would be difficult to assign a “tolerance level” here but zero is unlikely to be achievable. Perhaps this could be better placed under a Guideline?

GA11.3 suggests that returning birds from an abattoir to a growing area due to a procedural failure of the stunning capacity as a contingency. However, this presents a major biosecurity risk, which could put large numbers of birds in the growing facility at risk of disease. Operators would need to weigh the welfare considerations of the birds without a home against the potential health risks of exposing a possibly much larger flock.

Part B1 Laying Chickens

SB1.5 requires 4 hours continuous dark (Standard). Some recent research has indicated that intermittent lighting programs can be beneficial (based on naturally inspired lighting patterns) which may have shorter but more frequent periods of darkness (Edgar et al., 2018 APSS 29:82 using intermittent periods of 20 minutes light and dark). Perhaps there should be an allowance for this requirement to be responsive to new research findings as they develop?

GB1.1 refers to a square mesh size for flooring when not all cages have square mesh designs.

GB1.14 regarding perches being available at all times seems to ignore cages as most current conventional cages do not have perches.

GB1.24 What would constitute “deficient” use of shade/ shelter?

GB1.21 and GB1.25 are further references to not providing feed and water in outdoor areas. As mentioned above under SA3.5 and SA5.4, this precludes the caravan-style free range layer operations completely as they can only provide feed and water outside. Hence the birds are forced outside regardless of the prevailing conditions.

GB1.28 regarding scratch areas in colony cages and GB1.30 regarding scratch pad areas and GB1.31 referring to dust bathing material. Colony cages have not yet been adopted in Australia apart from a few research institutions. Research in Australia has shown that the birds only value a perch and a secluded laying area/ nest box. Other enrichments were mostly ignored by the birds. This Guideline has disregarded this science.

Part B2. Meat Chickens

SB2.1 requires a minimum 4 hour dark period for meat chickens older than 7 days. Recent research (Rodrigues et al., 2018 APSS 29:189) has discovered a beneficial effect on disease resilience of birds under an intermittent lighting program using repeated periods of 3 hours darkness. This Standard should make provision for response to new research findings as they become validated.

Part B3. Breeding Chickens

SB3.1 to 3.3 Keeping breeding chickens in cages is a rare occurrence in the industry, possibly only used with elite breeding stock in the egg laying breeds. It may be more used by the fancy breed keepers on a small scale.

SB3.5 requires 4 hours minimum periods of darkness but this also needs to be assessed in terms of emerging new research (as noted above).

Part B4. Ducks

SB4.2 states that trimming of duck bills will not be routine. Injurious feather pecking can be a serious problem in commercial duck flocks and this practice may be the only way to improve the situation. I recommend that this Standard is worded to except situations where serious injurious feather pecking may be expected and perhaps only under veterinary advice. Emphasis could be put upon supporting research on feather pecking in ducks to progress improvement and decrease the need for bill trimming.

SB4.4 requires the ability of ducks to be able to dip their heads under water. This would require the continuance of the use of trough drinkers and the trenches needed beneath them to avoid massive wet litter problems. Such troughs quickly become contaminated and are extremely unhygienic. These conditions are associated with higher levels of disease in duck flocks. There is much spillage and wastage of water with trough systems. If water medication for a bacterial disease becomes necessary, this system requires a multiplying of the medication dose rate to achieve an adequate dosage per duck. This is wasteful of antibiotics, increases their use rate and the possible development of bacterial resistance to them and compromises the responsible usage of antibiotics. There may be alternative systems under development (water sprays for example) that may be able to meet the perceived duck needs and not provide the unhygienic consequences involved with present systems. A gradually progressive approach here may be a better outcome.

Parts B5 through B13 cover species with which we have little to no experience and I can offer no advice here.

Thank you for the opportunity to submit comments on the Draft Standards and Guidelines. I hope that my comments are of use in the formulation of the completed requirements. I have concentrated on pointing out areas that may cause difficulties in interpretation or where some factors need a stronger understanding of the practices.

Yours faithfully,



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