

Scenario 1 - Colony cage egg production

Score sheet

Name of scorer: Expert 11

Welfare principles	Welfare criteria	Highest level of welfare - 100	1st round score	90% certain lower bound	90% certain upper bound	2nd round score	90% certain lower bound	90% certain upper bound	Comments
Good feeding	1. Provision and access to food. Animals should have appropriate access to the quantity and quality of appropriate foodstuffs for health and wellbeing.		70	60	80				Within this system the birds nutritional needs are typically met. However, there could be issues with limited diet choice and lack of foraging and potentially challenges are meeting some nutritional needs related to bone health. Within the colony there could also be issues for some birds accessing the feeders. The importance of the aspect is well recognised and will typically be managed to provide access. There could be instances of disruption of supply or individual birds not getting access to the feeders.
	2. Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.		70	60	80				
Good housing	3. Animals should have thermal comfort being neither too hot nor too cold.		40	30	46				The substrate and space available will compromise comfort. With an indoor managed system it should be possible to control thermal comfort. However, with climate change and the potential for issues with ventilation this aspect can become a challenge and compromise welfare. Within this confined system birds are significantly restricted in space and their ability to move freely is compromised.
	4. Animals should have sufficient space to move freely.		25	15	30				
Good health	5. Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).		50	40	60				Laying hen production has issues with feather pecking and keel bone fractures. This will be an issue for colony cages, although research has previously indicated that this system can have lower levels of feather pecking and keel bone injuries compared to other systems. In this system the birds are also protected from predation. This system can enable a high degree of biosecurity and protection from disease.
	7. Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.		70	60	75				
Appropriate behaviour	8. Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.		40	30	45				Animals are likely to suffer during depopulation. There could also be issues associated with management. Peak trimming in early life could also cause issues. The ability to express behavioural freedom is severely constrained within this system. Social behaviour will be adversely impacted, including the ability to perform positive affiliative social behaviour. The space restriction could also enhance issues of negative and aggressive interactions. The hens also don't have the chance to engage in maternal behaviour. The ability for behavioural expression including foraging and exploration will be severely constrained within this system. As a prey species human presence could be negative and there are likely to be issues associated with depopulation. This aspect will also be variable depending on stock person attitudes and behaviour. This system is likely to involve high levels of frustration and limited opportunities for positive experiences. There are also likely other negative environmental effects from the system on effective state.
	9. Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).		25	20	40				
	10. Animals should be able to express other normal behaviours (e.g. foraging, exploring).		15	10	25				
	11. Animals should be handled well with positive and not negative animal-human relationships.		20	15	25				
	12. Additional aspects not already adequately covered above in relation to the balance between positive and negative effective states for animals.		20	10	30				

Scenario 2 - Barn egg production

Score sheet

Name of scorer: Expert 11

Welfare principles	Welfare criteria	Highest level of welfare - 100	1st round score	90% certain lower bound	90% certain upper bound	2nd round score	90% certain lower bound	90% certain upper bound	Comments
Good feeding	1. Provision and access to food. Animals should have appropriate access to the quantity and quality of appropriate foodstuffs for health and wellbeing.		70	60	80				Within this system the birds nutritional needs are typically met. However, there could be issues with limited diet choice and lack of foraging and potentially challenges are meeting some nutritional needs related to bone health. Within the colony there could also be issues for some birds accessing the feeders. The importance of the aspect is well recognised and will typically be managed to provide access. There could be instances of disruption of supply or individual birds not getting access to the drinker.
	2. Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.		70	60	80				
Good housing	3. Animals should have thermal comfort being neither too hot nor too cold.		50	40	60				Within the indoor confined system there will be issues associated with the high stocking density and also potentially the quality of substrate and interference from other birds. With an indoor managed system it should be possible to control thermal comfort. However, with climate change and the potential for issues with ventilation this aspect can become a challenge and compromise welfare. Within this confined system birds are significantly restricted in space and their ability to move freely is compromised.
	4. Animals should have sufficient space to move freely.		60	50	70				
Good health	5. Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).		35	20	40				In this system there are risks for pecking related behavioural damage and keel bone damage, as well as lameness. This system can enable a high degree of biosecurity and protection from disease.
	7. Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.		70	60	80				
Appropriate behaviour	8. Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.		40	35	45				Animals are likely to suffer during depopulation. There could also be issues associated with management. Peak trimming in early life could also cause issues. The ability to express behavioural freedom is constrained within this system. Social behaviour will be adversely impacted, including the ability to perform positive affiliative social behaviour. The space restriction could also enhance issues of negative and aggressive interactions. The hens also don't have the chance to engage in maternal behaviour. The ability for behavioural expression including foraging and exploration will be constrained within this system. There are likely to be issues associated with handling at depopulation. This aspect will also be influenced by stock person attitudes and behaviour. This indoor system will have additional environmental aspects that will negatively impact effective state and limit the opportunities for positive experiences.
	9. Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).		50	40	60				
	10. Animals should be able to express other normal behaviours (e.g. foraging, exploring).		40	30	50				
	11. Animals should be handled well with positive and not negative animal-human relationships.		40	25	50				
	12. Additional aspects not already adequately covered above in relation to the balance between positive and negative effective states for animals.		40	25	50				

Free-range egg production (not including organic)

Score sheet

Name of scorer: Expert 11

Welfare principles	Welfare criteria	Highest level of welfare - 100	1st round score	90% certain lower bound	90% certain upper bound	2nd round score	90% certain lower bound	90% certain upper bound	Comments
Good feeding	1. Provision and access to food. Animals should have appropriate access to the quantity and quality of appropriate foodstuffs for health and wellbeing.		75	70	80				Within this systems animals should have the freedom to access feeders and drinkers. They should also have opportunities for additional nutrition from outdoor foraging. Within this systems birds should have the freedom to access drinkers. There could be issues associated with management if there is a disruption in water supply but that is likely to be a rare event.
	2. Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.		75	70	80				
Good housing	3. Animals should have comfort when nesting.		60	50	70				Within this system animals should have the freedom to find a comfortable nesting area. However, there could be issues with substrate quality and harmful social behaviour that disrupt this. Animals should have freedom to find suitable conditions for thermal comfort, either indoors or outside. However, there could be circumstances that disrupt this.
	4. Animals should have thermal comfort being neither too hot nor too cold.		60	40	70				
Good health	5. Animals should have sufficient space to move freely.		70	65	80				Within this system there should be sufficient space and behavioural freedom for animals to move freely. However, there could be issues disrupting this associated with dominance hierarchies and harmful pecking behaviour. In this system there are risks for pecking related behavioural damage and keel bone damage, as well as lameness. Within this system there are more biosecurity challenges and risks of certain diseases.
	6. Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).		35	20	40				
Appropriate behaviour	7. Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.		50	40	60				Animals are likely to suffer during depopulation. There could also be issues associated with management. Peak trimming in early life could also cause issues. In this system animals should have the freedom to express a range of social behaviours. In this system animals should have the freedom to express a comprehensive range of behaviours, including foraging and exploration. There are likely to be issues associated with handling at depopulation. This aspect will also be influenced by stock person attitudes and behaviour. Within this system there is good scope for experiencing positive affective states. However, there remains a risk of negative states arising from harmful social behavioural interactions. Predation, or the threat of predation could also be a threat within this system.
	8. Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.		40	35	45				
	9. Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).		80	70	90				
	10. Animals should be able to express other normal behaviours (e.g. foraging, exploring).		80	70	90				
	11. Animals should be handled well with positive and not negative animal-human relationships.		40	25	50				
	12. Additional aspects not already adequately covered above in relation to the balance between positive and negative effective states for animals.		60	50	70				