


Scenario 1 - Current beef with current lameness levels

Score sheet

Name of scorer: Expert 2

Comments Round 1

Comments Round 2

Welfare principles	Welfare criteria		
		0 - Lowest level of welfare	100 - Highest level of welfare
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.	
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.	
Good housing	3	Animals should have comfort when resting.	
	4	Animals should have thermal comfort being neither too hot nor too cold.	
	5	Animals should have sufficient space to move freely.	
Good health	6	Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	
	7	Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	
	11	Animals should be handled well with positive and not negative animal-human relationships.	
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.	

1st round score	90% certain lower bound	90% certain upper bound	2nd round score	90% certain lower bound	90% certain upper bound
60	50	70	60	50	70
80	70	90	80	70	
60	50	70	60	50	
60	50	70	70	60	
50	40	60	50	40	
50	40	60	50	40	
60	50	70	60	50	
60	50	70	60	50	
50	40	60	50	40	
60	50	70	60	50	
50	40	70	50	40	
50	40	60	50	40	

70 There will be significant variation between production systems and animals within those systems. For example, suckler cows may be feed restricted or on low quality pasture at certain stages. Alternatively for finishing cattle there can be issues with SARA associated with grain feed diets. In suckler systems there could also be issues with milk supply to offspring in some cases.

90 The importance of providing access to water is generally well recognised.

70 During periods of indoor housing (e.g. for suckler cows and finishing cattle) there can be comfort issues associated with 80 There is the potential for thermal comfort issues within each of the systems. For example in outdoor managed suckler cows there can be issues associated with changing weather, while indoors there can be issues associated with stocking density and poor ventilation.

60 This aspect is compromised for intensive confined beef finishing units.

60 Within beef production there is a relatively high prevalence of lameness from a variety of causes. In addition there can be skin disorders and lesions associated with housing conditions.

70 There is a relatively high disease burden associated with beef production. For example, during early life, dairy bred beef calves are at relatively high risk of respiratory and intestinal infections. There can also be issues associated with parasitic infections. Other diseases within different aspects of the system include SARA, mastitis, hypomagnesaemia, hypocalcaemia, and Johne's.

70 During early life animals will experience pain from disbudding and castration. There could also be pain associated with lameness and restraint for other husbandry procedures. In addition there is scope for pain associated with dystocia. There is also scope for pain associated with transport and slaughter.

60 In suckler cow systems there is good scope for maternal bonding. However, there is a big trade off at weaning. For dairy beef systems they are deprived of maternal social bonding. There is good scope for social interactions in other aspects of the system. This is constrained to some degree by indoor housing and depending on the stock density.

70 Depending on the stage and system there is good scope for the expression of other behaviours. Foraging could be constrained to some degree due to pasture management or whether being managed indoors.

70 This aspect is also dependent on the quality of stockperson attitudes and handling. For some aspects the handling will be negative (e.g. for restraint) and when moving animals.

60 There are potentially large trade offs within this system. For example during certain parts welfare can be enhanced when at pasture and associated with positive affective states and play behaviour in young animals. However, during the housing period and for finishing cattle this can be significantly compromised, including for other sensory experiences.


Scenario 2 - Beef production with 3% prevalence lameness mobility scores 2/3

Score sheet

Name of scorer: Expert 2

Comments Round 1

Comments Round 2

Welfare principles	Welfare criteria		
		0 - Lowest level of welfare	100 - Highest level of welfare
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.	
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.	
Good housing	3	Animals should have comfort when resting.	
	4	Animals should have thermal comfort being neither too hot nor too cold.	
	5	Animals should have sufficient space to move freely.	
Good health	6	Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	
	7	Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	
	11	Animals should be handled well with positive and not negative animal-human relationships.	
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.	

1st round score	90% certain lower bound	90% certain upper bound	2nd round score	90% certain lower bound	90% certain upper bound
70	60	80	70	60	
80	70	90	85	75	
70	60	80	70	60	
65	55	75	65	55	
50	40	60	55	45	
70	60	80	60	50	
60	50	70	70	60	
70	60	80	65	55	
55	45	65	55	45	
65	55	75	65	55	
60	50	70	60	50	
60	50	70	60	50	

80 There will be significant variation between production systems and animals within those systems. For example, suckler cows may be feed restricted or on low quality pasture at certain stages. Alternatively for finishing cattle there can be issues with SARA associated with grain feed diets. In suckler systems there could also be issues with milk supply to offspring in some cases. The reduction in lameness prevalence will promote enhanced access to food for those animals that otherwise could have been affected.

90 The importance of providing access to water is generally well recognised.

80 To achieve the lower levels of lameness it is likely that as part of that management the system would need to promote comfort. Apart from that there are still issues during periods of indoor housing (e.g. for suckler cows and finishing cattle) associated with stocking density and quality of housing. This is a particular issue with systems using slats.

75 There is the potential for thermal comfort issues within each of the systems. For example in outdoor managed suckler 65 This aspect is compromised for intensive confined beef finishing units.

70 The management changes required to reduce lameness will have a beneficial effect on this aspect. There can still be skin disorders and lesions associated with housing.

80 There is a relatively high disease burden associated with beef production. For example, during early life, dairy bred beef calves are at relatively high risk of respiratory and intestinal infections. There can also be issues associated with parasitic infections. Other diseases within different aspects of the system include SARA, mastitis, hypomagnesaemia, hypocalcaemia, and Johne's.

75 During early life animals will experience pain from disbudding and castration. There could also be pain associated with restraint for other husbandry procedures. In addition there is scope for pain associated with dystocia. There is also scope for pain associated with transport and slaughter.

65 In suckler cow systems there is good scope for maternal bonding. However, there is a big trade off at weaning. For dairy beef systems they are deprived of maternal social bonding. There is good scope for social interactions in other aspects of the system. This is constrained to some degree by indoor housing and depending on the stock density. There is a beneficial effect of reduced lameness on the expression of these behaviours.

75 Depending on the stage and system there is good scope for the expression of other behaviours. Foraging could be constrained to some degree due to pasture management or whether being managed indoors. There is a beneficial effect of reduced lameness on the expression of these behaviours.

70 With a lower prevalence of lameness there will be less need for restraint for treatment. This aspect is also dependent on the quality of stockperson attitudes and handling. For some aspects the handling will be negative (e.g. for restraint) and when moving animals.

70 The lower prevalence of lameness should enhance opportunities for positive affective states. There are potentially large trade offs within this system. For example during certain parts welfare can be enhanced when at pasture and associated with positive affective states and play behaviour in young animals. However, during the housing period and for finishing cattle this can be significantly compromised, including for other sensory experiences.