

Scenario 1 - Current beef with current lameness levels

Score sheet			Name of scorer: Expert 8			Comments Round 1			Comments Round 2		
Welfare principles	Welfare criteria		1st round score	90% certain lower bound	90% certain upper bound	2nd round score	90% certain lower bound	90% certain upper bound	1.3M suckler cows https://www.gov.uk/government/statistics/livestock-populations-in-the-united-kingdom/livestock-populations-in-the-united-kingdom-at-1-december-2020 Assume 1 calf/year per cow, and that each calf lives 18months to finish = 1 cow:1.5 youngstock in suckler system.		
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	60	90	75	60	90	not sure what % have access to grazing, type of grazing etc. Some beef finishers from suckling no longer have pasture access and some dairy beef never have pasture access. Most sucklers housed in winter. Dairy calves have poor feeding, not frequent enough and low quality= 20%, for 8 wks		
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.	95	80	98	95	80	98	Rare that water is not provided/ accessible. Potability of water occasionally an issue. Value of choice of water limited.		
Good housing	3	Animals should have comfort when resting.	80	60	90	80	60	90	Housed cattle often dirty (6months) but usually bedded and few bursae. Few slatted systems in GB. NI almost all slats https://www.daera-ni.gov.uk/articles/beef-management#:~:text=Most%20cattle%20are%20wintered%20on,has%20a%20higher%20absorptive%20ability.Choice of orientation. Outside sometimes poor resting conditions but most of the time comfortable on pasture.		
	4	Animals should have thermal comfort being neither too hot nor too cold.	80	60	90	80	60	90	Young dairy calves may have some compromise, otherwise few days of extreme heat/cold that would challenge most beef animals. Some environments little choice- housed.		
	5	Animals should have sufficient space to move freely.	50	40	60	53	40	60	Housing is usually relatively restricted, especially small pens (don't know proportion), but even in large barns. 50% of time for most animals, 100% for some.		
Good health	6	Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	70	60	80	75	60	80	Lameness prevs as reported. Few other injuries- ie #rare, but leg swellings on slats		
	7	Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	80	70	90	80	70	90	Other diseases reported but prevalences variable- lungworm, endoparasites, ringworm common, others less so.		
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	75	60	95	85	60	95	Castration of 50% and disbudding of 795%- as before score 5 for 1d, 20 for 4 wks. Only youngstock (ie 1/3 animals) in a year. Lameness as above (double counted)		
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	75	50	80	75	50	80	Dairy calves have some social contact but not with adults/ dam= 20%, Suckler animals generally possible, even if compromised a bit when housed by space. Groups of growing males can have mounting issues, even if similar to bachelor band.		
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	60	50	80	65	50	80	Foraging is variable, eating when housed is not naturalistic and some oral stereotypes in calves etc.		
	11	Animals should be handled well with positive and not negative animal-human relationships.	80	60	90	83	60	90	Often good relationship with farmers- daily. But when have to perform mgmt tasks not so good- ie in crush etc.		
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.									

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

Score sheet			Name of scorer: Expert 8			Comments Round 1			Comments Round 2		
Welfare principles	Welfare criteria		1st round	90% certain	90% certain	2nd round	90% certain	90% certain			
			score	lower bound	upper bound	score	lower bound	upper bound			
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	60	90	75	60	90	no sig diff		
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.	95	80	98	95	80	98	no sig diff		
Good housing	3	Animals should have comfort when resting.	80	60	90	80	60	90	no sig diff		
	4	Animals should have thermal comfort being neither too hot nor too cold.	80	60	90	80	60	90	no sig diff		
	5	Animals should have sufficient space to move freely.	53	40	60	53	40	60	improved ability to navigate space available		
Good health	6	Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	75	60	80	75	60	80	4-14% cattle not lame now, otherwise same.		
	7	Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	80	70	90	80	70	90	no sig diff		
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	85	60	95	85	60	95	lameness improvement		
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	75	50	80	77	50	80	no sig diff		
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	65	50	80	65	50	80	small improvement in foraging when at pasture		
	11	Animals should be handled well with positive and not negative animal-human relationships.	83	60	90	83	60	90	fewer treatments needed		
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.									