


Scenario 1 - Current dairy production

Score sheet

Name of scorer: Expert 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	
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.	65	50	90	55	40	90	Nutrition is usually well managed for productivity and 92% farms provide pasture access in the summer. However, many cows (<10%) still have low BCS, there's little variation in food and need to eat to maintain high production affects behaviour. Some displacements at feed face but relatively little difficulty in accessing indoor/outdoor feed. Lameness reduces standing and										
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.	90	80	95	90	80	95	Mostly good access to water although some social unrest around drinker										
Good housing	3	Animals should have comfort when resting.	60	40	70	60	40	70	Resting outside in summer is mostly comfortable, and chosen by cows. Inside, cubicle comfort is variable, loose yards are preferred but less common. Lame cows are likely in less pain when resting. ~10% HLS, 10% dirty										
	4	Animals should have thermal comfort being neither too hot nor too cold.	80	70	90	80	70	90	Wide thermal comfort range in adult cows but environments often offer little choice of temperature										
	5	Animals should have sufficient space to move freely.	55	50	80	55	50	80	Outdoors good, indoors poor. 50%/50% for most cows. Lame cows walk less. Space scored as 90 outdoors, 40 indoors for 92% herds= 65, reduced for the additional 8% indoor herds.										
Good health	6	Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	40	30	70	40	30	70	30% lame but also considered HLS										
	7	Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	40	30	70	40	30	70	Mastitis- SCC<200-17% prev, 10% chronic, incidence 30/100cows/yr https://ahdb.org.uk/knowledge-library/mastitis-in-dairy-cows-what-do-records-tell-us 10% dirty, esp indoors										
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	50	40	70	35	30	70	Considered disbudding experienced by adult dairy cows when calves, but NOT castration of any male offspring which are part of the system- if that was wrong, I need to rescroe. Up to 50% cows in pain at any one time (worse case scenario- lame prev 30% + mast SCC 17% (likely not all will be painful= 47%) + random other conditions), although likely some overlap, and some would be treated but I believe analgesia use is insufficient.										
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	60	50	80	40	30	70	Social interactions possible in all systems but frequent regrouping disrupts social structures. Early life isolation from dam = poor and weighted more heavily as formative time.										
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	55	50	70	55	50	70	At pasture, relatively good- although not complex environments, indoors less good. Lame cows restricted.										
	11	Animals should be handled well with positive and not negative animal-human relationships.	65	50	80	45	40	80	Most farms handle cows well, frequent interactions, daily routines familiar. Rare to have specifically positive interactions/ focus on reward-based training.										
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.	75	60	85	75	60	85	Few cognitive challenges, cows usually habituated to other sensory inputs eg loud noise etc.										

Scenario 2 - Dairy production with only 5% lameness score 2/3

Score sheet

Name of scorer: Expert 2

Comments

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	
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	50	90	60	50	90 fewer lame cows with difficulty accessing food	
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.						92	80	95	92	80	95 slightly better access	
Good housing	3	Animals should have comfort when resting.						70	40	70	70	40	70 Realistically farmers will have to improve housing comfort to 70 reduce lameness	
	4	Animals should have thermal comfort being neither too hot nor too cold.						80	70	90	80	70	90 no sig change	
	5	Animals should have sufficient space to move freely.						60	50	80	60	50	80 A few minor infrastructure changes may be made as per input list- to walkways inside, and to tracks outside. Unlikely more space/cow will be provided, although reduced stocking rate may be required to achieve it.	
Good health	6	Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).						70	50	90	70	50	90 Remaining 5% lame plus random other things.	
	7	Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.						60	40	75	60	40	75 Some of the measures to improve lameness will probably also improve mastitis a bit	
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.						65	50	75	50	30	70 Fewer animals in pain due to lameness and maybe mastitis	
	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).						65	50	80	45	30	70 Some improvement due to better mobility	
Appropriate behaviour	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).						60	50	70	60	50	70 Some improvement due to better mobility	
	11	Animals should be handled well with positive and not negative animal-human relationships.						68	50	80	55	40	70 Maybe small improvement due to not being lame	
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.						75	60	85	75	60	85 no sig difference	