

Scenario 1 - Current dairy production

Score sheet

Name of scorer: Expert 11

Comments

Welfare principles	Welfare criteria	<div>0 – Lowest level of welfare</div> <div>→</div> <div>Highest level of welfare – 100</div>	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.	50					
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.	60					
Good housing	3	Animals should have comfort when resting.	50					
	4	Animals should have thermal comfort being neither too hot nor too cold.	60					
	5	Animals should have sufficient space to move freely.	40					
Good health	6	Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	20					
	7	Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	40					
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	30					
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	25					
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	30					
	11	Animals should be handled well with positive and not negative animal-human relationships.	30					
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.	30					

Currently, dairy cattle are housed in the winter and some are housed in the summer as well. Since the 2014 March et al paper, there has been a move for some retailers to guarantee outdoor access. However, the choice of food indoors, while nutritionally good, is the same at every feeding. Grazing cattle may have more choice of pasture, but limited pasture species. Lamé cows will be hampered in their ability to feed when they want.

Water is provided in troughs, which is usually of good quality, but lame cows may be reluctant to stand up and walk to drink.

Cows are generally given clean beds, but cubicle systems are restrictive in terms of lying posture. Encouraging good lying allows cows to take the weight off their feet.

Cows are generally given shelter and shade, but in extreme climatic conditions may be challenging. Lamé cows may be reluctant to move about, which limits their ability to seek areas with better shade, shelter, air flow etc.

Housed dairy cows have relatively limited space to walk. Grazing cow have better access to space. Lamé cows may not be able to use the space to the best of their ability, due to reluctance to walk

Lamé cows are clearly experiencing a poor state of welfare.

Some lameness conditions are the result of disease (e.g., digital dermatitis) so welfare is poor in these animals

Lameness is a multifactorial condition which is due in part to poor management

Lamé cows are reluctant to walk so they cannot exhibit social behaviour in a normal way

Lamé cows are not able to comfortably express other normal behaviours that involve movement, and will experience pain when they do so

As lame cows are reluctant to move, they are often the ones that handlers have to 'encourage'/push into the milking yard etc.

I am using this criteria as a 'summary' as I can't think of any other emotional state not covered. Pain and lack of ability to express normal behaviour makes for a poor quality of life.

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

Score sheet

Name of scorer: Expert 11

Comments

Welfare principles	Welfare criteria	<div>0 – Lowest level of welfare</div> <div>→</div> <div>Highest level of welfare – 100</div>	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.	55					
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and wellbeing.	65					
Good housing	3	Animals should have comfort when resting.	50					
	4	Animals should have thermal comfort being neither too hot nor too cold.	65					
	5	Animals should have sufficient space to move freely.	45					
Good health	6	Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	55					
	7	Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	55					
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	50					
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	50					
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	45					
	11	Animals should be handled well with positive and not negative animal-human relationships.	50					
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.	50					

The diet for housed cows is the monotonous, even though it is nutritionally sound. Grazing cows have a bit more choice, but sward species still limited

Clean ad lib water provided in troughs.

Cubicles are restrictive to lying postures

Cows are protected from worst of the weather, but housing will prevent free choice in avoiding heat stress

Housing is restrictive on animal movement, but a decrease in lameness would allow most of the cows to access the facilities in the housing

Improving lameness would go a long way to improving this criteria, but conditions like mastitis are still prevalent

Improving lameness will be important, but some conditions such as metabolic disease still prevalent

Improving lameness should reduce pain

Reducing lameness will allow most of the cows to express normal behaviour, but the lack of space within the housing restricts social behaviour

Again, reducing lameness will allow most of the cows the opportunity to perform more natural behaviour but housing restricts normal behaviour

If cows are not lame they are more likely to experience a good quality of human animal interaction

Using this as a catch all for overall experience!