

Scenario 1 - Current use of farrowing crates in pig production

Sheet		Name of scorer: Expert 5						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 feedstuff(s) for health and well-being.	60	40	80	60	40		Consider only those offered sufficient feed to ensure good production. Some feed a number of discrete meals per day, typically, and without compensation that they may be fed less than they require. This is not a welfare issue. Lack of access to feed for water. Piglets should have sufficient access to milk and therefore sufficient water/hay - excreted by the litter.	
	2 Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and well-being.	60	40	80	60	40		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
Good housing	3 Animals should have comfort when resting.	25	10	40	25	10		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
	4 Animals should have thermal comfort being neither too hot nor too cold.	10	0	20	10	0		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
Good health	5 Animals should have sufficient space to move freely.	10	0	15	10	0		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
	6 Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	25	10	40	25	10		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
	7 Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	50	40	60	50	40		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
	8 Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	10	0	15	10	0		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
Good health	9 Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	10	0	15	10	0		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
	10 Animals should be able to express other normal behaviours (e.g. foraging, exploration).	10	0	15	10	0		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
	11 Animals should be handled well with positive and not negative animal-human relationships.	20	0	40	20	0		800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	
Appropriate behaviour	12 Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.							800 litres of water is often in excess of requirement for lactating sows. Piglets may be required to have water at water 2 or 3 weeks, presumably provided continuously in farmwide troughs. However, insufficient access to milk for lactating, increased litter size, reduced feed intake, reduced feed intake or water could lead to death.	

Scenario 2 - Free farrowing

Welfare principles		Name of scorer: Expert 5						Comments	
	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 feedstuff(s) for health and well-being.	60	40	80	60	40		Endocrine suggests colostrum production before in free-feeding systems but depending on species, it may be more difficult for some piglets to get sufficient access to milk.	
	2 Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and well-being.	60	40	80	60	40			
Good housing	3 Animals should have comfort when resting.	60	40	80	25	10		80% of cases with regard to comfort is related to use with other systems.	
	4 Animals should have thermal comfort being neither too hot nor too cold.	65	40	80	50	20		In farms - comfort should be improved but greater changes in choice of type and area of pasture, but flooring may not be best. Chastities of young are likely dependent on age/region. Some comfort possibly provided for piglets in cross-fosters.	
Good health	5 Animals should have sufficient space to move freely.	40	0	75	10	0		Thermal comfort should be improved in some housing having a slightly better ability to perform thermoregulatory behaviours.	
	6 Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	50	40	60	50	40		15 Sows should be able to perform basic locomotory behaviour in these systems. They are not likely to be able to perform the full set of locomotion they would like, however, particularly during wet bedding, or when the piglets are young.	
	7 Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	60	40	80	60	40		80% of substantial evidence to suggest difference in injury level.	
	8 Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	70	50	80	50	30		80 No strong evidence to suggest significant difference to other systems.	
Appropriate behaviour	9 Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	50	40	70	10	0		Presumably better ability to change posture, perform locomotory behaviour and escape if necessary associated with less pain. Rigidly specified to prevent procedures but not to the system.	
	10 Animals should be able to express other normal behaviours (e.g. foraging, exploration).	50	40	70	10	0		Normal motoric behaviours more possible in this system (including nesting/bedding of suitable substrates provided, and interacting with piglets). Leaving the piglets will likely be not possible, and the risk of stress or injury to sows with cross-fosters.	
	11 Animals should be handled well with positive and not negative animal-human relationships.	40	20	60	20	0		Ability to perform management/escape and foraging behaviour will likely be very much 20% allowed in this system. Lack of social interaction.	
	12 Additional aspects not already well covered above in relation to the balance between positive and negative affective states for animals.							Handling of sows will likely be restricted to management (e.g. in separating, blood sampling, mixing with farrowers), and therefore cause minimal. Perhaps easier to foster good animal-human relations where not so restricted.	

Scenario 3 - Temporary use of farrowing crates

Score sheet		Name of scorer: Expert 5						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 feedstuff(s) for health and well-being.	60	40	80	60	40		No strong evidence of significant differences to conventional crates in relation to provision of access to food.
	2 Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and well-being.	60	40	80	60	40		No strong evidence of significant differences to conventional crates in relation to provision of access to water.
Good housing	3 Animals should have comfort when resting.	40	20	60	40	20		For ease, comfort should be improved when used in case of greater freedom to change position, and lack of contact with bars but flooring may still be hard. Chances of injury are low.
	4 Animals should have thermal comfort being neither too hot nor too cold.	60	40	80	60	40		For dairy, comfort should be improved when used in case of greater freedom to change position, and lack of contact with bars but flooring may still be hard. Chances of injury are low. Animals dependent on pen design. Most can still provide comfort for pigs in a creep area.
Good health	5 Animals should have sufficient space to move freely.	15	0	25	15	0		For dairy, space may be improved by a slightly better design of creep area to perform more effectively between pens. Pigs require less access to heat source in winter.
	6 Animals should be free from injuries and disorders (e.g. skin conditions, lameness, bone fractures etc.).	50	40	60	50	40		Can be improved when lying down.
	7 Animals should be free from disease, including metabolic conditions, with high standards of health care and hygiene.	60	40	80	60	40		See row turn around but don't use row to move freely. Pigs are also restricted from moving freely (Don't see us).
	8 Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	55	40	70	55	40		No evidence of substantial differences to conventional crates.
Appropriate behaviour	9 Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	20	10	30	20	10		80% evidence of substantial differences relative to conventional crates. Presumably piglets subjected to change position and escape this system associated with less pain, but still unable to perform normal movement (perhaps not suitable in joint pens).
	10 Animals should be able to express other normal behaviours (e.g. foraging, exploration).	20	10	30	20	10		70% piglets subjected to general provisions but not escape this system.
	11 Animals should be handled well with positive and not negative animal-human relationships.	20	10	30	20	10		80% evidence of substantial differences relative to conventional crates. Pigs are able to express normal, non-harmful social behaviours such as grooming and social bonding. Ability to perform more exploratory activity and foraging behaviour is better and usually seen. Pigs are able to express appropriate behaviours, particularly for the use of feeding of water and pigs likely to be restricted to management tasks (e.g. inspecting, sorting, mixing with forams, and therefore cause problems). Perhaps easier to inspect animal human relations but not seen or not restricted.
	12 Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.							