

Scenario 3 - Current use of farrowing crates in pig production

Welfare principles		Name of scorer: Expert 8										Comments		Comments: 81	
Welfare principle	Welfare criteria	+ or - current practice		+ or - current practice		+ or - current practice		+ or - current practice		+ or - current practice		Comments	Comments: 81		
		Not round score	10% certain lower bound	10% certain upper bound	2nd round score	10% certain lower bound	10% certain upper bound	10% certain lower bound	10% certain upper bound						
Good feeding	1	Provision and access to food. Animals should have appropriate access to the quantity and quality of appropriate feedstuffs for health and well-being.	40	30	50	30	25					Does and gets fed/restricted diet typically around 60-70% of ad libitum intake choice, also diet is restricted during pregnancy and lactation, leading to hunger and frustration. Fed to support physiological but not behavioural needs. Large litter sizes lead to increased competition, not enough feed for all piglets, may lead to hunger. Restricted to all systems.	General comment: confidence increased following expert discussion.		
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and well-being.	55	50	70	60	50					In large litters increased competition for access to water may lead to thirst - all systems. Difficulty standing may reduce access to water for sows, but when she is out of crate access may be improved. No choice of water source for preference/behavioural needs.	Reduced access. Food is being fed, not what choice to be eating, even if fed at 10%, competition around feeders. Sows hungry most of the time. More piglets, being fed at 5%.		
Good housing	3	Animals should have comfort when resting.	30	10	30	15	10					Not enough space to turn around, often difficulty in lying down (interrupted behavioural sequence, sleeping/uncontrolled movements) no bedding/bedding material, unclean floors of plastic/mats/straw/soil/wooden floors. Also for piglets - also abrasions evidence. May not have access to bedding and be an uncomfortable floor outside of farrowing.	Slight increase		
	4	Animals should have thermal comfort being neither too hot nor too cold.	40	30	60	40	35					Farrowing sows event high muscular activity, lactating sows have a high metabolic heat production associated with milk production, potentially exacerbated by confinement. Sows can be hot, heat stress is a risk. Unable to withdraw or move to areas of preferred temperature.	Slight reduction following discussion on lack of comfortable surfaces, resting positions		
Good health	5	Animals should have sufficient space to move freely.	20	10	40	20	10					Not even enough space to turn around. Difficulty standing and lying (unstable attempts to stand/lie, interrupted behavioural sequence, sleeping/uncontrolled movements). Piglets also little room. Outside of farrowing/lactating, more room to move around but still confined in pen.	Although outside of crate system, likely to be in more comfort, no change here.		
	6	Animals should be free from injuries and diseases (e.g. skin conditions, lameness, sore fractures etc.).	30	30	50	30	30					Some for the long periods in the same position. Compression of blood vessels, muscle blood circulation. Possible metabolic disorders by data/effort which can also be related to slow, legs and joints. Sows may knock parts of their body against the metal bars, abrasion of the skin on the feet and on the base of the ear can be seen (pressure ulcers), contact with the floor causes lesions to hooves and claws. Soft tissue/hoof lesions higher in contact with the floor than sows. Also from piglets as can't move away. Lactation is major issue in housing sows but sows whether it is related to housing conditions. Social stress, still not even and lactating sows competition can due to have opportunities to express exploratory behaviour, also abrasions from lack of bedding, but enough space to avoid frequent contact between the sow back and ventral, negative social interactions and aggression or heat competition leads to skin damage in piglets.	No change - still in very restricted system, outside the crate system.		
Good health	7	Animals should be free from diseases including metabolic conditions, with high standards of health care and hygiene.	50	20	70	50	40					Will be led by the pen on this as well as with prevalence of disease and metabolic conditions in sows/piglets, but producers likely to be focused on health care and hygiene, although restriction may lead to lying in faeces.	Lying - reduced bone strength, relatively high prevalence.		
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	30	20	50	40	30					Pain from injuries and diseases discussed above, from tail docking, tail biting due to lack of enrichment. Pain and distress by C&D slaughter.	Vaccinated. Hygiene not necessarily good.		
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	10	10	30	10	10					Aggressive behaviour towards piglets increased in crate in house housing, control escape piglets, limited availability to avoid unwanted interactions, unable to perform maternal/social bonding behaviours e.g. social nursing, teaching, sniffing, sow terminate nursing bouts more often, spend less time nursing overall than in free farrowing system no gradual weaning (all systems) piglets in large litters increased fighting due to heat competition (all systems). Sows spend longer in isolation than in natural conditions, lack of stimulation early in life may lead to development of aggressive/defensive behaviours later in life e.g. aggression, belly nuzzling and tail and ear biting. Not able to maintain family groups/flocks. Outside of farrowing/lactating period, lack of space may continue to prevent ability to express optimal social behaviours.	Lack of ability to change position when giving birth likely to be painful. Poor management - old crates with big pigs, deep to 6 and 8 to 6. Changed score accordingly.		
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	10	10	30	10	10					Unable to nest build. Increases restlessness, frequent posture changing, stereotypes. Farrowing duration increases due to the stress resulting from the frustration of sows endogenously motivated needs build a nest. Sows cannot turn around or walk. Can't escape from piglets as they grow. No material for investigation/investigation for other sows or piglets. Unable to leave nest to defecate/urinate. When no reproductive material or substrate is provided piglets, exploratory behaviour can be redirected to pen mates.	Critics show harmful behaviour around piglets. No change		
Appropriate behaviour	11	Animals should be handled well with positive and not negative animal-human relationships.	30	20	50	30	20					Little opportunity for positive human-animal relationship.	No change		
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.	30	20	50	30	20					Stress, discomfort during transport. Lack of cognitive enrichment.	Increased confidence		
Sensory enrichment - nuzzling in barns, reduction. Account for importance of cognitive enrichment.															
BT "Housing material is provided regardless of the slurry system"															

Scenario 2 - Free farrowing

Welfare principles		Name of scorer: Expert 8										Comments 1		Comments 2	
Welfare principles	Welfare criteria	+ or - current practice		+ or - current practice		+ or - current practice		+ or - current practice		+ or - current practice		Comments	Comments 2		
		Not round score	10% certain lower bound	10% certain upper bound	2nd round score	10% certain lower bound	10% certain upper bound	10% certain lower bound	10% certain upper bound						
Good feeding	1	Provision and access to food. Animals should have appropriate access to the quantity and quality of appropriate feedstuffs for health and well-being.	40	30	50	40	30					Does and gets fed/restricted diet typically around round 60-70% of ad libitum intake choice, also diet is restricted during pregnancy and lactation, leading to hunger and frustration. Fed to support physiological but not behavioural needs. Large litter sizes lead to increased competition, not enough feed for all piglets, may lead to hunger. Restricted to all systems.	No change		
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and well-being.	70	60	80	70	60					In large litters increased competition for access to water may lead to thirst - all systems. No choice of water source for preference/behavioural needs.	Not need to have access to water before 2 weeks		
Good housing	3	Animals should have comfort when resting.	40	40	70	40	40					Not too free farrowing opportunity to have bedding and solid floors. Could have more space for choice of resting positions, choice of bedding. More space and better flooring may be thermoregulation, heat stress less of an issue, cold stress not much of an issue, lack choice.	10 weeks of a year for the sow, no real improvement for the piglets, flooring is similar.		
	4	Animals should have thermal comfort being neither too hot nor too cold.	55	50	60	50	40					More space and better flooring may be thermoregulation, heat stress less of an issue, cold stress not much of an issue, lack choice.	Mostly solid floors and ensuring straw.		
Good health	5	Animals should have sufficient space to move freely.	30	10	40	30	10					Not enough space to turn around, change postures, more more freely. But still confined to a pen. Also likely in barn rest of time.	Can't say more freely - still a pen. Probably more likely to get larger straw court.		
	6	Animals should be free from injuries and diseases (e.g. skin conditions, lameness, sore fractures etc.).	60	40	70	40	40					Piglet crushing is an issue because a comparable to daily performance from with sows, sows within system variation and highly up related to resting rate. Restless able to be managed by allowing expression of maternal behaviour and restriction for good practices, and increase hygiene with separate dirty bedding.			
Good health	7	Animals should be free from diseases including metabolic conditions, with high standards of health care and hygiene.	60	40	70	40	40					Not tail docking, tail biting due to lack of enrichment and C&D slaughter still an issue.			
	8	Animals should not suffer pain - for example as a result of poor management, handling or other procedures, slaughter etc.	50	30	60	45	30					Sow able to move away somewhat from piglets but are still confined to allow to increase distance from litter sufficiently looking behaviour and fighting are repeatedly often in housing conditions. But the sow is free to express maternal behaviours. Little care and monitoring rate still highly relevant.	Slight decrease - still not a huge amount of space and limited opportunity to interact with sow.		
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	50	40	60	45	30					Large area for play locomotion and exploration, bodied nesting area and activity/fighting area, long cut straw or similar material provided.			
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	50	30	60	40	30					Not still a level of confinement and low level of opportunity for foraging and exploring, also sows.	Maybe not as big an increase. At least animals have a bit more control over interaction with humans but not much interactions likely not to be positive ones.		
Appropriate behaviour	11	Animals should be handled well with positive and not negative animal-human relationships.	50	20	60	40	20					Neuromuscular discomfort during transport. Lack of cognitive enrichment.	Same as for crate scores.		
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.	30	10	40	30	10								

Scenario 3 - Temporary use of farrowing crates

Welfare principles		Name of scorer: Expert 8		Comments									
Welfare principles	Welfare criteria	+ or - current practice		+ or - current practice		+ or - current practice		+ or - current practice		+ or - current practice		Comments	Comments: 2
		Not round score	10% certain lower bound	10% certain upper bound	2nd round score	10% certain lower bound	10% certain upper bound	10% certain lower bound	10% certain upper bound	10% certain lower bound	10% certain upper bound		
Good feeding	1	Animals should have appropriate access to the quantity and quality of appropriate feedstuffs for health and well-being.	40	30	50	30	25					Sows and gilts fed/restricted diet typically around 60-70% of ad libitum intake choice, also diet is restricted during pregnancy and lactation, leading to hunger and frustration. Fed to support physiological but not behavioural needs. Large litter sizes lead to increased competition, not enough feed for all piglets, may lead to hunger. Restricted to all systems. Percentage of piglet mortality due to prolonged farrowing hard not to differ between sows housed and temporarily confined farrowing sows.	No change
	2	Provision and access to water. Animals should have appropriate access to the quantity and quality of water for health and well-being.	65	60	75	65	50					In large litters increased competition for access to water may lead to thirst - all systems. Difficulty standing may reduce access to water for sows, but when she is out of crate access may be improved. No choice of water source for preference/behavioural needs.	Not need to have access to water before 2 weeks
Good housing	3	Animals should have comfort when resting.	25	15	35	15	15					Not enough space to turn around, often difficulty in lying down (interrupted behavioural sequence, sleeping/uncontrolled movements) no bedding/bedding material, unclean floors of plastic/mats/straw/soil/wooden floors. Also for piglets - also abrasions evidence. But time to crate is reduced. May not have access to bedding and be an uncomfortable floor outside of farrowing.	10 weeks of a year for the sow, no real improvement for the piglets, flooring is similar.
	4	Animals should have thermal comfort being neither too hot nor too cold.	45	35	65	45	35					Farrowing sows event high muscular activity, lactating sows have a high metabolic heat production associated with milk production, potentially exacerbated by confinement. Sows can be hot, heat stress is a risk. Unable to withdraw or move to areas of preferred temperature. But time 45 confined reduced.	Mostly solid floors and ensuring straw.
Good health	5	Animals should have sufficient space to move freely.	30	10	40	30	10					Not even enough space to turn around. Difficulty standing and lying (unstable attempts to stand/lie, interrupted behavioural sequence, sleeping/uncontrolled movements). But time in pen reduced. Piglets also little room. Outside of farrowing/lactating, more room to move around but still confined to a pen.	Can't say more freely - still a pen. Probably more likely to get larger straw court.
	6	Animals should be free from injuries and diseases (e.g. skin conditions, lameness, sore fractures etc.).	35	35	55	35	35					Some as for farrowing crates but length of time reduced. Piglet crushing slightly increased but can be managed through breeding (litter size, piglet management). Some for the long periods in the same position. Compression of blood vessels, muscle blood circulation. Possible metabolic disorders by data/effort which can also be related to slow, legs and joints. Sows may knock parts of their body against the metal bars, abrasion of the skin on the feet and on the base of the ear can be seen (pressure ulcers), contact with the floor causes lesions to hooves and claws. Soft tissue/hoof lesions higher in contact with the floor than sows. Also from piglets as can't move away. Lactation is major issue in housing sows but sows whether it is related to housing conditions. Social stress, still not even and lactating sows competition can due to have opportunities to express exploratory behaviour, also abrasions from lack of bedding, but enough space to avoid frequent contact between the sow back and ventral, negative social interactions and aggression or heat competition leads to skin damage in piglets.	
	7	Animals should be free from diseases including metabolic conditions, with high standards of health care and hygiene.	50	20	70	50	40					Will be led by the pen on this as well as with prevalence of disease and metabolic conditions in sows/piglets, but producers likely to be focused on health care and hygiene, although restriction may lead to lying in faeces.	Slight decrease - still not a huge amount of space and limited opportunity to interact with sow.
	8	Animals should not suffer pain - for example as a result of poor management, handling, surgical or other procedures, slaughter etc.	40	20	50	40	30					Pain from injuries and diseases discussed above, from tail docking, tail biting due to lack of enrichment. Pain and distress by C&D slaughter.	Maybe not as big an increase. At least animals have a bit more control over interaction with humans but not much interactions likely not to be positive ones.
Appropriate behaviour	9	Animals should be able to express normal, non-harmful social behaviours (such as grooming and social bonding).	15	15	35	15	15					Aggressive behaviour towards piglets increased in crate in house housing, control escape piglets, limited availability to avoid unwanted interactions, unable to perform maternal/social bonding behaviours e.g. social nursing, teaching, sniffing, sow terminate nursing bouts more often, spend less time nursing overall than in free farrowing system no gradual weaning (all systems) piglets in large litters increased fighting due to heat competition (all systems). Sows spend longer in isolation than in natural conditions, lack of stimulation early in life may lead to development of aggressive/defensive behaviours later in life e.g. aggression, belly nuzzling and tail and ear biting. Not able to maintain family groups/flocks. Outside of farrowing/lactating period, lack of space may continue to prevent ability to express optimal social behaviours.	Same as for crate scores.
	10	Animals should be able to express other normal behaviours (e.g. foraging, exploring).	15	15	35	15	15					Unable to nest build. Increases restlessness, frequent posture changing, stereotypes. Farrowing duration increases due to the stress resulting from the frustration of sows endogenously motivated needs build a nest. Sows cannot turn around or walk. Can't escape from piglets as they grow. No material for investigation/investigation for other sows or piglets. Unable to leave nest to defecate/urinate. When no reproductive material or substrate is provided piglets, exploratory behaviour can be redirected to pen mates.	
	11	Animals should be handled well with positive and not negative animal-human relationships.	15	15	35	15	15					Little opportunity for positive human-animal relationship.	
	12	Additional aspects not already adequately covered above in relation to the balance between positive and negative affective states for animals.	30	10	40	30	10					Neuromuscular discomfort during transport. Lack of cognitive enrichment.	