

NPA BRIEFING

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NPA briefing on farrowing crates

General

- The Welfare of Farmed Animals (England) Regulations 2007 ^[1] legislates for provisions for the welfare of pigs and implements Council Directive 2008/120/EC. The legislation allows for female pigs (sows and gilts) to be kept in a farrowing crate (Figure 1) from the week before expected farrowing (giving birth), during farrowing and until the piglets are weaned.
- Approximately 40% of sows in Britain (around 160,000) are kept on outdoor farms and farrow freely (unconfined) in farrowing arcs in paddocks. The majority of the remaining 60% of sows, which are kept on indoor pig units, give birth and suckle their piglets in a farrowing crate. A small but increasing number of indoor pig units do have facilities for sows to farrow freely indoors.
- Piglets are usually weaned between 24 and 28 days of age, meaning most sows spend a maximum of five weeks in a farrowing crate in any one period, although some can spend a week or two longer in them if they become nurse sows for fostered piglets.
- In the UK sows must be housed together in groups directly after weaning, where they remain until they are next due to farrow. This is in contrast to most EU countries, where it is permitted for sows to be kept in gestation stalls for up to four weeks after service (mating)

Conventional farrowing crates



- Pig farmers use farrowing crates, first and foremost to prevent the sow from rolling on and crushing her piglets (due to the sow being about 150 times the size of the piglets).
- The crate also enables stockpersons to work easily and safely around the sow and her piglets, during a time when sows can be particularly aggressive.
- Conventional farrowing crates have been criticised for restricting sow movement, because she can only stand up, sit or lie down but not turn around. There are also limitations on the use of nest-building material such as straw due to the slatted flooring systems typically used in farrowing pens to reduce disease challenge to new-born piglets.
- However, most pig farmers would argue that the farrowing crate provides a safe environment for the sow, piglet and stockpersons during this critical time.
- Although it is not always possible to provide nesting material in traditional farrowing pens, it is a legal requirement that pigs of all ages have access to sufficient environmental enrichment and many farmers provide enrichment such as toys, hessian

Figure 1 – Conventional farrowing crate

sacks and ropes in farrowing pens to occupy sows. Shredded paper and sawdust are also commonly provided for the sow to nest with and also to dry and warm the piglets as they are born.

Alternative farrowing systems

- A wide range of “free-farrowing” pens and temporary crating systems have been designed and developed by academics, engineers and pig producers over many years (Figures 2 & 3) ^[2]. These include;

Individual pens in which sows can move around freely

Temporary crating which enable the sow to be confined for short periods at critical times (i.e. around the time of farrowing) but are then opened up to allow the sow freer movement

Group lactation systems whereby sows farrow in individual pens before being moved to group pens with other sows and their litters during the suckling period



Figure 2 - Temporary crating system



Figure 3 – PigSAFE free-farrowing pen developed by researchers at SRUC and Newcastle University

- In October 2015, the Farm Animal Welfare Committee (FAWC) published an opinion on free-farrowing systems ^[3] in which it concluded: “FAWC favours movement in the pig industry towards well designed and operated free farrowing systems. Universal use of such systems should be the aim, but their commercial development is not yet sufficiently advanced to recommend compulsory replacement of farrowing crates.”
- There are many alternative farrowing systems being developed in Europe, but to date very few are in commercial production. Of the main pig producing countries, Denmark aimed to reach 10% free farrowing by 2020 but failed to meet this target. Germany announced in 2020 that its producers would be expected to move to temporary crating systems by 2035 following many years of negotiations with its pig farmers. Most other countries around the world such as the USA and Canada use farrowing crates as standard and have made no attempts to move away from them.
- Defra’s stated ambition is to raise our already high animal welfare standards still further as new research and evidence emerges. This extends to wanting to see an end to the use of farrowing crates, an aim reflected in the new pig welfare code. They do accept however that this needs to be done in a way that protects both the sow and her piglets, but in a way that is sustainable for the industry. There still remain a number of barriers to the uptake of free-farrowing systems and we have already begun discussions with Defra Ministers on how to progress.

Barriers to uptake

- Despite research and numerous commercial trials involving various indoor free-farrowing systems, including on British pig farms, a number of challenges remain which preclude more widespread uptake of these systems.
- A primary barrier to uptake is the higher rates of pre-weaning piglet mortality experienced due to crushing associated with free-farrowing, although actual mortality rates depend very much on the farm, type of pen used and management of the pen ^[4,5]. Typical mortality in conventional farrowing systems is usually between 10-12%. In alternative systems looking at the evidence from

hundreds of sows, piglet mortality of between 14- 22% is regularly experienced. If pig farmers encountered an increase in pre-weaning mortality of just 3%, this would account for 180,000 piglet deaths, equivalent to one week's production.

- While piglet mortality is often higher on outdoor pig farms due to loose farrowing, the losses are partly offset by the premium that pork from these farms commands and the low cost of the farrowing hut infrastructure compared to indoor housing.
- Economic modelling has suggested pork produced using a free-farrowing pen (PigSAFE) would need to command a 1.6% premium (2-3 p/kg) to allow producers to break even, if piglet mortality remains at the same level ^[6].
- An additional significant barrier is the capital cost associated with constructing new pig buildings or converting existing buildings to free-farrowing systems. While some free-farrowing systems have been designed within the same footprint as a conventional farrowing crate (4.3 m²), most require significantly more space (e.g. PigSAFE requires 8.9 m²). An average farrowing crate will cost around £3,000 whereas temporary crating systems cost around £5,000 and free-farrowing pens cost around £7,000 per sow place. ^[7].
- A concern for pig farmers rearing pigs in indoor systems is that they would have to bear the full cost of converting to a free-farrowing system and any associated production losses thereafter, because they are unlikely to be paid a higher price for pigs born in this way. There is also the fact that buildings typically have a 25-year life, which is a long-term investment to make when there is no certainty that there will be a market for such a product into the future. This is a risk that many are not willing or able to take. Cost and difficulty in obtaining planning permission is also a factor.
- Although many farmers have trialled a small number of alternative farrowing pens alongside conventional crates, ideally the entire system should be converted to one system to provide consistency for the sows as they do not cope well with changes to their routines. This would require quite significant capital outlay which may discourage farmers, particularly when there is no market premium available or guarantee of future support.
- Other concerns with indoor free-farrowing systems include the inability to keep the pen hygienic, the safety of stockpersons and increased labour time.
- In 2008 Defra funded the development of the PigSAFE zero-confinement farrowing pen, but since then no government funding has been made available to help producers move to alternative systems or for further research and development. Significant government funding in terms of research, development and grants has been made available to pig producers in other EU countries however, and still they are far behind the UK in terms of percentage sows farrowing freely.

NPA position:

- The NPA would strongly oppose any attempt to unilaterally ban the use of farrowing crates. Without the proper time, advice, suitable systems and training, the lives of tens of thousands of baby piglets will be put at risk.
- An NPA member survey suggested that 43% of pig farmers would exit the industry if a ban was brought in at any point. Aside from the fact that the shortfall in production would have to be substituted with imported product from countries still using farrowing crates, there would be huge ramifications for the industry that remained in terms of infrastructure support and critical mass.
- Commercially comparable results consistently show that mortality in alternative farrowing systems is higher than in conventional farrowing crates. Whilst some results are promising, we are simply not yet in a place where the number of piglets dying in these systems is acceptable and it is hard to believe that the general public would accept such losses. We need further research, based on comparable systems to UK production, in order for producers to consider any future infrastructure changes.
- Bans are a blunt tool used to achieve compliance, but as we have seen many times in the past, they are beset by unintended consequences and often fail to achieve the desired result. The 1999 stall ban resulted in the loss of half the UK pig industry, which was subsequently exported to

the EU where it was another 14 years before stalls were only partially banned. Adding insult to injury, the UK then imported increased quantities of EU pork produced in the very systems that the government had made illegal in the UK.

- The British pig sector is already far ahead of most other pig-producing countries in terms of zero-confinement farrowing, in that 40% of the national sow herd farrow freely on outdoor pig units. Further expansion of the outdoor herd however, would be ill-advised due to lack of suitable free draining land, increasingly extreme weather events and environmental pollution challenges.
- Whilst some pig farmers are trialling alternative farrowing systems, increased piglet mortality and lack of support or incentive from the supply chain has prevented many from considering such a move.
- We believe that more pig farmers would be likely to move to temporary crating systems if given the support to do so, as unlike zero confinement, these systems still allow the farmer to have an element of control and protect the sow, piglet and staff if needed but will give farmers an opportunity to manage sows more freely during farrowing.
- Minimising piglet deaths, stock person safety and mental well-being, cost (of conversion and on-going management), supply chain support, the need for information and training, demonstration of suitable systems in commercial settings, planning considerations, and equivalent standards within trade deals will need to be addressed before further transition could be considered. What is absolutely crucial is that the welfare of piglets, sows or staff is not detrimentally affected for the sake of something that aesthetically appears to be better.
- NPA encourage government and other stakeholders in the pork supply chain, including processors, retailers and consumers, to support those that wish to move towards alternative farrowing systems by helping to address some of the key barriers identified and enabling them to recoup the associated on-going costs.

For more information, please contact Dr Zoe Davies (zoe.davies@npanet.org.uk)

References

^[1]http://www.legislation.gov.uk/ukxi/2007/2078/pdfs/ukxi_20072078_en.pdf

^[2]https://www.freefarrowing.org/info/1/farrowing_systems

^[3]https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/478588/Opinion_on_Free_Farrowing_Systems.pdf

^[4]https://www.researchgate.net/publication/258038320_Higher_prewaning_mortality_in_free_farrowing_pens_compared_with_farrowing_crates_in_three_commercial_pig_farms

^[5]https://www.freefarrowing.org/downloads/file/36/summary_of_key_performance_indicators_of_different_farrowing_systems

^[6] https://www.freefarrowing.org/downloads/file/34/modelling_free_farrowing_economics

^[7] Personal communication with V Morgan who is running a commercial free farrowing system in the UK.