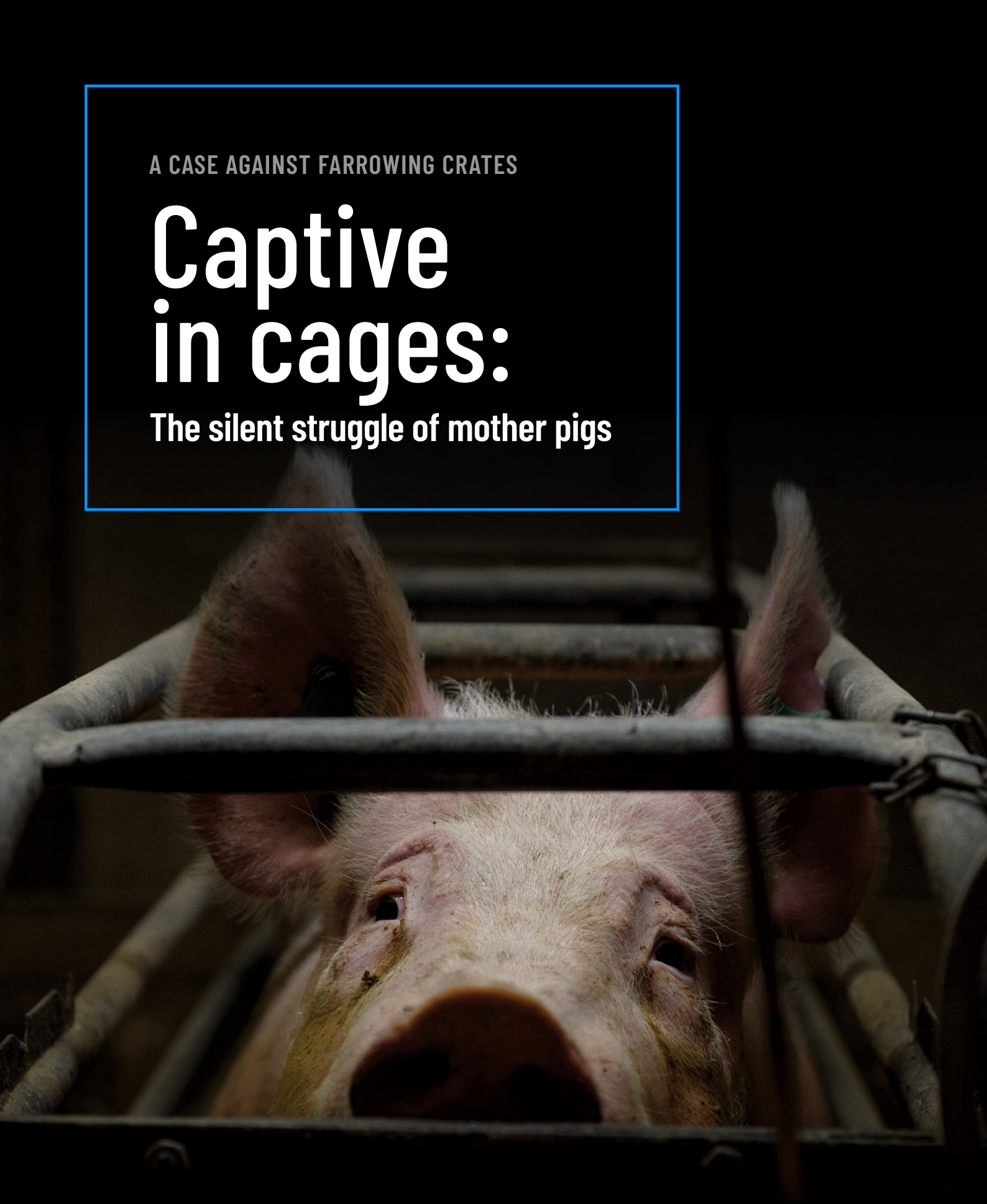
A CASE AGAINST FARROWING CRATES

Captive in cages:

The silent struggle of mother pigs



animalEQUALITY
UNITED KINGDOM

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Cover photo: Animal Equality | Aitor Garmendia

This report unveils previously unpublished data about the behaviour of pigs confined in farrowing crates across the United Kingdom. Having gathered over 120 hours of footage from a pig farm in England, we successfully monitored the behaviour of three pigs kept in cages so small that they were unable to turn around.

Our findings show that one pig did not sit up at all for an entire day. Another did not engage with the 'enrichment' (a wooden block and/or plastic stick attached to the cage) provided at any point during the five-day period. And, collectively, the animals bit the bars 127 times — more than once every hour — a marker of extreme stress and frustration. On average, they spent over 90% of their time lying on the ground.

The conclusions to be drawn are not novel. For decades, mother pigs have been confined in these cages while experts, animal advocates, politicians, and even farmers have been speaking out against them. In April 2025, the British Veterinary Association also sounded the alarm and called for an end to this practice, expressing concern over the impact of the cages on animal welfare[1]. Such treatment of pigs runs counter to our reputation as a nation of animal lovers — certainly, no animal lover would tolerate such abuse if they were aware of it.

Abigail Penny
Executive Director, Animal Equality UK

Although at any one time 200,000 of the UK's 'breeding pigs' are kept in these cages for years of their lives, these animals are in factory farms across the UK, away from public view. It is then no wonder that over 60% of Brits[2] do not even know of the very existence of these cages, yet, once they are informed, 96% oppose them[3].

Often scarred by their confinement, both physically and psychologically — as this comprehensive report details — pigs in farrowing crates are unable to carry out many of their most natural nesting and nurturing behaviours, suffering from stillbirths and deep pressure sores as a result.

60% of UK 'breeding pigs' are destined to spend nearly a quarter of their adult lives in these cages every year. It is a deliberate choice to make this controversial practice permissible by law and it doesn't have to be this way.

We would never allow a pregnant dog to be caged for five weeks at a time, offered nothing but a wooden block to play with. Why should a pregnant pig be any different?

The animals are not in a position to turn this situation around, but together we as a society can. It's time for the UK to ban farrowing crates.

A pig's life

Born and reared in an intensive breeding facility

10-11 million piglets are bred and killed for human consumption each year in the UK[4].

Painfully mutilated

At just a few days old, around three-quarters of UK piglets have their tails cut off[5] without pain relief. Since they are kept in unnatural, crowded conditions, in which they are usually under-stimulated, the stressful surroundings can cause piglets to bite one another out of boredom or frustration. The industry cuts off their tails and teeth as a result. Many will also have their teeth 'clipped', also without anaesthetic.

'Fattened' up

After being weaned at just 3-4 weeks and separated from their mothers, these young piglets are moved into groups in larger sheds for 'fattening'.

Sent to slaughter

At around five months of age, once the pigs weigh around 120kg[6], they are loaded onto a truck and transported to a slaughterhouse, where they are painfully gassed with CO_2 or killed through electrical stunning and throat-slitting[7].

Photo, top right: Animal Equality | Aitor Garmendia

A mother pig's life

- Approximately 338,000 female pigs are used for breeding in the UK each year[8].
- At around 6-8 months of age[9], each one will be forcibly impregnated and moved into group housing. A pig used to breed piglets for human consumption is known as a 'gilt' until she has had her first litter of piglets, and is then referred to as a 'sow'.
- She will remain pregnant for around four months before giving birth to an average of 16 piglets[10]. Days before giving birth, like over 200,000 others in her position, she will be confined in a cage so small that she cannot turn around. She will then nurse her young behind bars for a month, before they are separated from her.
- Around five days after weaning, she will be impregnated once again.
- 'Sows' in the industrialised farming system normally are forced to have around six litters. Then, once her fertility begins to decline, the pig industry will deem her no longer 'commercially or economically viable' and she will be sent to slaughter, like her babies before her.
- 'Breeding sows' are killed at around 3.5 years of age[11]. Naturally, a pig can live to the age of 20 or even older.

Photo: Animal Equality | Aitor Garmendia

Farrowing crates: Legalised suffering

Confining pigs in cages is cruel and causes them intense suffering as the evidence shows:

- A 'farrowing crate' is a highly restrictive cage used to cruelly confine pregnant pigs just before they give birth and for four weeks after their babies are born. These cages severely limit a pig's natural behaviour and movement.
- Around 200,000 mother pigs — approximately 60% of all breeding females — are confined in farrowing crates in the UK each year.
- Mother pigs give birth to around two litters each year, spending approximately five weeks at a time in a farrowing crate. This means they spend around 22% of their lives in these cages[12] — the equivalent of 18 years for you or me.
- Beside the cage there is the 'creep', which piglets can move into. It is usually heated. When piglets are in this space, their mother cannot clean or interact with them. Often, she cannot even see them.
- Farrowing crates were first introduced in the 1960s and have been banned in several countries.
- The pig industry claims that these cages reduce piglet deaths, but piglets are still frequently accidentally crushed by their mothers inside these cages.
- Evidence suggests these cages actually increase the risk of stillbirth[13], and many piglets die from starvation and disease too.
- Pigs are known to be as smart as a three-year-old human, but these intelligent animals are usually given merely a block of wood or plastic to occupy their minds while confined.
- Pigs are protective, nurturing mothers, with strong instincts to nest-build and nurse their young[14]. These cages force them to nurse behind bars.

- Many pigs suffer from pressure sores of their feet, limbs, and shoulders due to the small cages and hard surface[15].
- Mother pigs become frustrated in these conditions and can resort to biting the bars, scraping their feet on the ground, destroying or chewing on their feed trough, and flooding the pens with their drinkers.
- Made to eat, sleep and defecate in the same space, the cage can become very dirty over time.
- Unable to turn around, some pigs become painfully stuck between the bars.

UK CITIZENS WOULD BACK A BAN

96% are against farrowing crates[16].

Currently, **the UK is only ranked ninth in Europe** by number of cage-free animals, behind Austria, Belgium, Denmark, Germany, Luxemburg, the Netherlands, Slovenia and Sweden[17].

Compassion in World Farming UK secured **over 100,000 signatures of support** for the 'End the Cage Age' petition[18].

An analysis of pig behaviour in farrowing crates:

Perspective of an animal welfare expert

Dr Helen Lambert

With over two decades of experience working and researching in the field of animal research, Dr Lambert has provided consultation to the Government's Department for Environment, Food, and Rural Affairs; European Commission-funded consortium, aWISH, regarding animal welfare indicators within slaughterhouses; and is a Board Member for the Stakeholder Advisory Board for the Animal Welfare Research Network.

In June 2024, three mother pigs were filmed inside farrowing crates on Cross Farm in Holsworthy Beacon, Devon, England. The farm confines around 12,000 pigs each year; it is Red Tractor-certified and a supplier to Tesco supermarkets[19].

Filming took place for five days continuously, with the exception of one brief camera battery change, lasting several minutes.

Animal Equality UK subsequently analysed the footage to document the behaviour of these three pigs *quantitatively*, recording how many times the animals performed a behaviour and how long they spent standing, lying or sitting. These results and the footage were then also *qualitatively* analysed by an external scientist — Dr Helen Lambert — to provide further expert insights and draw inferences regarding the animals' mental state.

A richer picture: Combining quantitative and qualitative analysis

There is strong evidence to suggest that qualitative analysis involving the use of behavioural and postural observations enables reliable qualitative judgements to be formed about an animal's mental state. One such approach is Qualitative Behaviour Assessment (QBA) [20], a holistic tool that allows observers to describe an animal's behaviour using expressive terms that reflect their emotional state. QBA has been used to assess the mental state of pigs in various conditions [21]. Although a formal QBA assessment is not feasible due to the limitations of the available footage (e.g., restricted camera angles), the qualitative descriptors used in QBA have been validated in multiple contexts.

These descriptors, supported by a robust body of research, provide a scientifically grounded framework for interpreting the behavioural expressions of these pigs. Therefore, while this analysis does not follow the structured QBA methodology, it draws upon established qualitative descriptors to discuss the pigs' emotional and mental states in an evidence-based manner. The quantitative and qualitative outcomes are discussed together to best illustrate how the welfare of these pigs is compromised by the severe confinement they are experiencing.

Over a five day period (24 hours a day as the pigs were continuously lit):

	PIG ONE	PIG TWO	PIG THREE
Sat upright	0.6% of the total time (40 minutes 2 seconds)	4.1% of the total time (4 hours 51 minutes 34 seconds)	2.0% of the total time (2 hours 25 minutes 38 seconds)
Stood up	4.5% of the total time (5 hours 26 minutes 11 seconds)	8.3% of the total time (9 hours 59 minutes 55 seconds)	5.5% of the total time (6 hours 35 minutes 30 seconds)
Lay down	94.9% of the total time (113 hours 54 minutes and 47 seconds)	87.6% of the total time (105 hours 8 minutes 31 seconds)	92.5% of the total time (111 hours 59 minutes 52 seconds)
Bit the cage bars	23 times	54 times	50 times
Notable	Pig 'One' did not sit upright at all on day five.	Pig 'Two' did not engage with enrichment at all on day one.	Pig 'Three' did not engage with enrichment at any time during the five days.

On average, across the three pigs over the five-day period, the pigs:

- Spent 91.7% of their time lying down.
- Spent 2.2% of their time sitting up.
- Spent 6.1% of their time standing up .
- Spent 0% of their time walking, because their crates prevented them from doing so.
- Spent 0% of their time rooting in the ground, because rooting substrate was not provided.

Key findings

Upon analysing the footage, we discovered:

- The pigs spent far more time lying down compared to pigs who are not in cages.
- The pigs sleep, eat, and defecate in the same area, causing discomfort.
- The pigs struggled to move or stand.
- The pigs cannot walk or root.
- The pigs' interactions with provided enrichment did little to alleviate their frustration.
- The pigs exhibited stress responses, including sham chewing and bar-biting.

Using Animal Equality's footage as a case study, Dr Lambert provides expert commentary and insights below.

1. Resting in restraint

When analysing the footage, we found that all three pigs spent most of their time lying down. Over the five days, the three pigs collectively spent over 90% of their time lying down. Whilst mothers of very young piglets will naturally rest a lot following giving birth[22], **those in farrowing crates are known to spend considerably more time lying down compared with sows who are in pens or are free-ranging[23].**

Numerous other factors, including comfort, temperature, leg health, diurnal patterns, and external influences and events can also influence lying behaviour. Whilst this makes it difficult to discern a specific level of welfare based on lying time[24], **it is clear that the nature of the housing system adversely affects behavioural patterns by inhibiting the ability of pigs to engage in basic and motivated behaviours such as walking and rooting.**

This is likely to be why these three pigs, and others also in farrowing crates, spend considerably more time lying down than postpartum pigs who can move more freely[25].

2. A lack of comfort

These three mothers must also lie or stand on bare flooring, as any bedding material is situated in the piglets' nest area. Furthermore, whilst their front legs are on solid flooring, their back legs are typically on the slatted dunging area. The back area of these crates, known as the dunging area, is slatted so that the pigs' urine and faeces can fall through the gaps. Whilst this may be helpful from a practical perspective, **it is deeply unnatural for pigs to defecate and urinate where they eat and sleep**, as they would normally do this in a separate area[26]. Instead, these pigs must sleep, eat and defecate all in the same area, all the while exposed to the noxious build-up of ammonia that typically occurs in the slurry pit underneath[27].

The slatted flooring itself can also be uncomfortable and even painful for the pigs to stand on. In fact, slatted flooring is known to be a major risk to leg health in pigs, and even partial slats can cause a higher prevalence of painful leg and foot disorders[28]. Partially slatted flooring can also impact piglet leg health. Whilst piglets are typically encouraged away from this area by heating the nest if they do go into the dunging area, the slats cause issues with weight bearing which can result in injuries in young piglets[29].

The use of slatted flooring often means that the sows are not given substrate, such as straw, as it conflicts with the slurry system[30]. It is clear from the footage that whilst the piglets have access to bedding, there does not appear to be any provision for the sow, as she cannot access the bedded area. Pigs show clear preferences for straw as

Photo: Animal Equality | Aitor Garmendia

a lying surface and as a foraging material, and being denied access to it is likely to contribute to a poor negative mental state in these animals[31].

Spending long periods lying down on their sides also increases these pigs' risk of painful shoulder sores, as they have been bred to be leaner, removing their natural cushioning[32]. Furthermore, when crated, pigs typically favour lying on one side so that their udders face the piglet's nest area[33]. This can exacerbate the sores these pigs incur, as their maternal instincts urge them to keep lying on that side so that they can better nurse their piglets. This is apparent in the footage where the sows repeatedly lie on the same side to face their piglets.

In addition, it is clear from the footage that these crates offer little room for the pigs to lie down comfortably, and when lying down, their backs are typically right up against the bars, with the bars digging into their skin. Given that these pigs spend most of their time in this position, such cramped lying positions will likely cause considerable discomfort.

Pigs, like many other animals, show when they are feeling pain through subtle facial expressions, which can be assessed to determine the degree of pain they are feeling[34]. Unfortunately, close-ups of the pigs' faces are required for this, so such an analysis is not possible in this instance. However, for these pigs, the pain caused by any sustained bruising and lesions resulting from the cramped conditions they are kept in is likely to become clearly expressed in their faces, especially after several weeks in the crate.

3. Changing position in a small cage

Changing posture from lying to standing and vice versa is challenging in a crate, as the dimensions significantly impede movement and cause the sows to repeatedly bump into the bars[35]. Consequently, pigs are known to reduce posture changes in these crates, which may also explain why these three pigs spend so much time lying down[36]. In our qualitative analysis of the footage, we noted that these three sows repeatedly collided with the bars when changing position.

Whilst utilising the support of a wall can help sows to lie down more slowly and minimise the risk of lying on piglets, the sequences reviewed in the footage show cases where the structure of the pen restricts the free movement of the sow in a way that hinders her change in posture. In addition, some of the collisions with **the crate structure may inflict pain and bruising**, as in some incidents, they appear to be forceful. It also appears that the same parts of the sows routinely come into contact with the bars, which, over time, may exacerbate any painful bruising experienced.

4. No room to walk and root

Due to the confinement of the crate, these three pigs spent 0% of their time walking. Furthermore, due to the lack of provision of rooting substrate, they also spent 0% of their time engaged in rooting behaviour. Rooting is where pigs use their snouts to dig, nudge, and explore the ground. These natural behaviours are core parts of a pig's behavioural repertoire, and they are highly motivated to perform them. For example, in near-natural forest conditions, pigs given ad libitum feed still spend 24% of their time rooting[37].

Therefore, this behaviour is not just driven by hunger and clearly fulfils other motivations and behavioural needs for pigs. Linked to this is the exploratory nature of pigs, for which they require the ability to move freely about their environment. Rooting enables pigs to explore underground, but walking allows them to explore above ground, interact with their environment, and cover large areas whilst doing so[38].

5. So-called 'enrichment'

UK legislation requires farmers to provide pigs with 'appropriate environmental enrichment materials'. Enrichment should encourage and facilitate natural and instinctive behaviours, allowing the animal to engage in behaviours that bring about positive mental states. However, these three pigs, like most pigs in their situation, are only given a wooden block and/or a plastic stick to 'enrich' them, both of which fail to

Photo: Animal Equality | Aitor Garmendia

consider their behavioural traits and needs. As already outlined, pigs are naturally highly explorative animals and will spend considerable time rooting and exploring their environment. The enrichment these pigs are given is suspended at head level, which is at odds with their natural inclination to root in the ground.

Furthermore, pigs are highly intelligent and inquisitive animals, and **these 'enrichment' devices do little to keep their attention** as they have no interactive or dynamic elements. For instance, when rooting, pigs will uncover not only edible items from which they may experience gustatory pleasure but also different textures and smells that provide tactile and olfactory complexity to their environment. Therefore, these inanimate 'enrichment' objects are not only placed in a way that fails to elicit any opportunities for rooting behaviour, but their lack of complexity means that they are also unlikely to engage the pigs positively.

In fact, according to our analysis of the footage, only 'Pig One' and 'Pig Two' interacted with the enrichment during the five days of footage, and 'Pig Three' did not interact with it at all. Over the five days, these two pigs interacted with the enrichment 48 and 52 times. In terms of analysis, a pig was considered to engage with the enrichment if she nudged or struck the object with her snout, and a bout was considered over when she either ceased engaging with it for at least one second or moved onto a mutually exclusive activity such as lying down or bar biting. Each of these 'interactions' was typically brief, comprising one or two nudges, lasting two or three seconds, with one exception where 'Pig One' engaged with the 'enrichment for' 17 seconds. From a qualitative perspective, these interactions were not considered to elicit positive emotions such as pleasure, as the pigs had tense postures during these interactions and repeatedly struck and knocked the enrichment as if (unsuccessfully) driving it to produce a food reward.

Furthermore, many of the enrichment interactions are preceded or followed by bar-biting, which is a stereotypical behaviour indicative of frustration and stress (see below). In addition, bouts of enrichment interaction are also often performed in combination with sham chewing, another stereotypic behaviour associated with frustration and stress (see below). Therefore, these **enrichment interactions seem to do little to alleviate the stress and frustration of these pigs**, and the fact that these behaviours are often performed in succession suggests a sequence of frustrated behaviours in which the pigs move from one frustrated interaction to another.

The fact that 'Pig Three' did not engage with her enrichment throughout the five days is reflective of the individual personalities of the three pigs. Pigs, like all sentient beings, have distinct personalities, which can impact how they perceive, react and cope with different stressors and experiences. Whilst 'Pig Three' will still experience the frustration and stress the others are feeling, she may express those emotions differently.

Photo: Animal Equality | Aitor Garmendia

Furthermore, whilst the enrichment may not elicit positive feelings in pigs 'One and Two', they may still find it rewarding in the sense that it allows them to express their frustration by striking and nosing the enrichment[39]. For instance, pigs are known to exhibit their frustration through increased oral activity[40], and the 'enrichment' may offer them an opportunity to do this. However, whilst this may be considered 'rewarding' from a behavioural perspective, this does not necessarily equate to a positive mental experience. 'Pig Three', on the other hand, may choose to exhibit her frustration in different ways, finding the act of bar-biting, for example, more 'rewarding' in this sense. Therefore, the enrichment provides two of the pigs with the means to express their frustrations but does nothing to enrich any of their lives or mitigate their frustration at their housing conditions.

6. Stereotypic behaviours

Throughout the footage, the sows can be seen engaging in two key stereotypic behaviours: **sham chewing and bar-biting**. A stereotypic behaviour is the term for an abnormal behaviour that is repeatedly performed for no apparent purpose. They are usually borne out of frustration and stress due to an animal's inability to perform normal, instinctive behaviours.

Sham chewing (also known as vacuum chewing) refers to the seemingly purposeless chewing motion performed by pigs even when no food is in their mouth. For the majority of their waking time, the pigs in our footage perform sham chewing, and this unnatural behaviour is indicative of the stress, agitation and frustration they are experiencing[41]. This observation aligns with others as individually crated sows are known to perform this stereotypic behaviour more often than group-housed sows[42].

As already discussed, the performance of sham chewing is often part of a sequence of other behaviours likely to be driven by frustration. One example shows 'Pig Two' performing sham chewing as she moves from one action to another, biting the bar, nosing and biting the hanging enrichment, sniffing the floor and the air, placing her snout in and out of the bars, looking about, and stomping her feet. **Such agitated and restless behaviour is considered to be indicative of a negative mental state**[43]. Similar examples can be seen throughout the five days of footage, and as discussed earlier, there were numerous times when a pig moved from the enrichment to bar biting, or vice versa, all interspersed with sham chewing. However, these three pigs also perform sham chewing whilst lying down or standing and are otherwise inactive. From a qualitative perspective, these examples are not associated with such clearly agitated behaviour but are more reminiscent of listlessness or apathy. Such descriptors would also indicate a negative mental state in these animals.

Bar-biting is another stereotypical behaviour that is repeatedly seen in this footage. All three of the pigs perform bar biting on multiple occasions. 'Pig One' bit the bars on her cage 23 times, whereas pigs 'Two and Three' bit them 54 and 50 times over the five days. Like with the interaction with the enrichment, a bout of bar-biting was considered over when there was a break in the behaviour of at least one second, or the pig moved onto a mutually exclusive behaviour (e.g. sat or lay down, or interacted with the enrichment).

Bar-biting is considered to be another sign of stress and frustration in crated sows and, like sham chewing, is typically performed more often by crated sows than free-ranging ones[44]. Bar-biting can soon become an injurious behaviour, as the repeated performance of this unnatural behaviour can lead to painful mouth lesions and damaged teeth[45]. As with the enrichment interactions, when bar-biting, the pigs maintain a tense body posture while performing the repeated

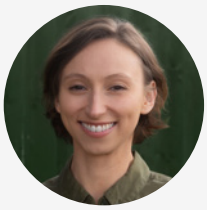
and purposeful behaviours. The pigs each appear to bite the bars with some force, often dragging their mouths and teeth along the bars. Their movements show clear signs of agitation as they frequently flit from one bar or head position to another. The bar-biting is often preceded or followed by enrichment interactions and is typically interspersed with sham chewing. The whole demeanour of the pigs during these bouts, including their tense and restless postures, the force and frequency of the biting behaviour, and the fast transitions between behaviours, indicate that they are experiencing negative mental states during these interactions, likely to be the result of considerable frustration.

Conclusion

In conclusion, the quantitative data and the qualitative interpretations of the footage indicate that the mental state of these three pigs is severely compromised.

Not only do these small crates prevent these sentient beings from moving freely and exercising control over their environment, but the measures legislatively required to 'enrich' their lives fail to do anything more than allow them to exhibit their clear frustration at their situation. These intelligent, emotional, and playful beings — each with a unique personality, strong social bonds, and a deep desire to feel good — deserve better than this.

Deprivation in the farrowing house:
Perspective of a British pig veterinary surgeon



Dr Alice Brough BVM&S MRCVS

Dr Alice Brough BVM&S MRCVS is a pig veterinarian who worked as a commercial pig vet in the UK industry from 2015-2019, with clients spanning every size and system of pig farming. Before her veterinary training at the University of Edinburgh, she worked in the farrowing house of an intensive pig farm for several months, where most of the 300 sows were confined to conventional crates, while a small proportion were in trial 'temporary crating' accommodation.

While Animal Equality's footage provides a real-life example of how these animals suffer tremendously — both psychologically and physically — there is an abundance of evidence gathered over recent decades to suggest the responses of the three pigs filmed on this English farm are not unique. Dr Brough investigates further below.

1. Enrichment

Studies have shown that pigs will go to great lengths to avoid boredom, completing tasks with no reward simply to be doing *something*, whether it be challenging, novel or solving a problem[46].

Photo: Animal Equality | Aitor Garmendia

They also need to use their environment in particular ways during different phases of their lives, such as the collection of materials to build nests in the lead up to farrowing, or rooting in search of food. As captivity reduces the stimulation animals need for a fulfilled life without boredom, environmental and behavioural enrichment provided as part of the husbandry is meant to compensate for this shortcoming. However, in practice, adequate enrichment is not provided.

Conventional crate-based farrowing houses are at odds with what the government recommends regarding adequate enrichment material. The Department of Environment, Food & Rural Affairs' Code of Practice for the Welfare of Pigs[47] states: *'In the week before the expected farrowing time, sows and gilts must be given suitable nesting material in sufficient quantity unless it is not technically feasible for the slurry system used... Where the provision of larger volumes of enrichment material is limited due to the floor and slurry removal systems, owners/keepers should ensure that what is provided is replenished sufficiently often to maintain interest'.*

Due to farrowing crates predominantly being constructed on slatted or partially-slatted flooring, the clause above allows for inadequate provision of nesting, bedding or enrichment material.

DEFRA's Code categorises enrichment materials into 'optimal', 'suboptimal' and 'materials of marginal interest'. From the footage provided, the farm analysed in this report makes use of partially-slatted flooring (concrete and plastic), and provides a small amount of shredded paper and a hard wooden block chained up at head-height for enrichment.

Shredded paper falls into the 'suboptimal' category, while hard wood is a 'material of marginal interest'. The enrichment does not appear to be supplemented with other novel materials or provided in a quantity that could satisfy nesting behaviours or provide comfort to the sow, with the small amount of shredded paper afforded to these mothers quickly moving out of their reach from the crate.

As already outlined by Dr Lambert, when observing sows in the footage their interaction with the wooden block seems minimal, and even a possible source of frustration; the chain attachment causes the block to move away from her mouth when she tries to bite it, which would, if she was able, satisfy one of the criteria for appropriate enrichment in the Code (chewable). Hard wood is not manipulable, edible or investigable; the remaining three of four criteria. The minimal interaction shown in the footage does not appear to resemble play behaviour; butting the block with their snouts repetitively, and quickly moving back to bar biting. Some don't engage at all with the materials provided.

This 'enrichment' is at head-height, and again as highlighted already by Dr Lambert, the majority of their natural behaviours are performed at ground-level (nesting and rooting). This is a typical example of the inappropriate provision of enrichment across the industry; 'toys' given to pigs rarely resemble anything they would encounter in nature, can become soiled quickly, and are not refreshed for novelty and hygiene frequently enough to maintain interest. Also, rooting is a foraging behaviour, and, as such, pigs will encounter a variety of edible rewards in the wild. A large proportion of 'enrichment' afforded to farmed pigs does not come with an edible reward and certainly very little variety. Crated sows have nothing to root or forage, leaving them frustrated and redirecting behaviour to pathological stereotypies.

In my experience, not all crated sows in the UK are provided with enrichment, of any form,

Photo: Animal Equality | Aitor Garmendia

and those who are, are provided with forms of enrichment that classify as inadequate, but may nevertheless tick a box in line with the legislation. **Throughout years of farm work, veterinary practice, and subsequent years reviewing investigation footage, I have never seen enrichment adequate to satisfy their welfare needs provided to crated sows**.

For inspections, part of assurance schemes or otherwise, farmers usually have sufficient prior warning to clean up, provide bedding and enrichment, and make the unit look the best it can, without guarantee that this continues outside of inspection dates. The result of a lack of oversight and investment in animal welfare means that some farms are providing enrichment for the benefit of inspectors rather than the animals; this was evident at many of my emergency visits outside of routine quarterly inspections.

2. Unnatural conditions[48]

FEEDING

In nature, pigs will spend almost all their waking hours rooting and foraging for food. The farm shown in the footage doesn't appear to have an automatic feeder system, so it is likely these sows were fed once or twice a day, as per industry norms. Consuming food and water is more or less all these sows have to do, so restricting that to only once or twice a day can bring dire consequences.

My experience of feeding time in the farrowing house (twice daily) was fraught with sows screaming, banging bars and feeders with their snouts, jumping around in their crates and pawing at the ground; clear markers of stress and agitation. This stress around feeding can be fatal, with gorging of food, swallowing air and bodily tension sometimes resulting in abdominal organ torsion — something observed far more commonly in crated sows than free roaming.

LIGHT

There is a lack of natural light in many farrowing houses. In the footage provided, tiny, high-up windows out of the pigs' view are the only sources of natural light. Some investigations have found lights left on overnight, including Animal Equality's case study provided here, where lights were on for every hour of every day for the entire recording period. **This absence of natural light and unusual hours of artificial light can interfere with diurnal rhythms, and likely adds to the psychological, as well as physiological, distress these animals experience**, spending their days only able to see the metal feeder directly in front of their faces.

Photo: Animal Equality | Aitor Garmendia

DISTURBANCE

Sows in the wild move away from their sounder (group) to farrow, sometimes walking for miles a day to locate an isolated nest site. There can be tens of sows in one shed lined up next to each other in crates, all making noise, some very distressed, and farrowing at different times. Once farrowed, there will be hundreds of piglets in that same shed, with associated aversive noise when being handled for mutilations, vaccinations and any treatments, or when accidentally crushed.

Farm workers have to enter sheds frequently, sometimes having to interact with or handle sows and piglets. Due to the nature of these interactions often being aversive, causing pain and fear, and sometimes a lack of understanding of pig behaviour, the presence of stockpeople can cause arousal when they walk through the sheds. This can result in disturbed sleep and interruption of farrowing or nursing, and increase the risk of injuries to piglets.

3. Stereotypies

The intense confinement in farrowing houses induces a number of abnormal behaviours in pigs that indicate difficulties in coping with their situation, as is evidenced in the footage obtained by Animal Equality and in Dr Lambert's assessment.

Pigs have a range of strongly motivated natural behaviours[49] which are imperative to their overall wellbeing. Wild pigs spend the majority of their waking hours rooting and foraging for food. When animals cannot perform natural behaviours or do not have enough stimulation due to captivity, they develop repetitive behaviours with no apparent function, known as stereotypies. Crated pigs often show this. The bar-biting observed in crated sows is an abnormal repetitive behaviour, borne out of stress and boredom. Pigs are extremely intelligent and emotionally and socially complex, so the frustration they feel in such severe confinement causes them to attempt to develop coping strategies. The inhibition of strongly motivated natural behaviours leaves the sows attempting to mimic these behaviours in pathological ways.

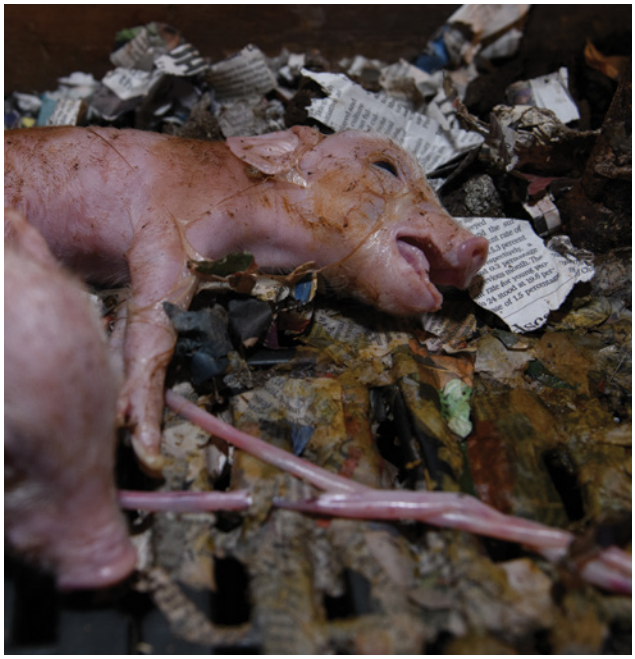


Photo: Animal Equality | Aitor Garmendia

In the absence of rooting, foraging, nesting, roaming, exploring, playing, interacting with other pigs within a normal grouping, and natural surroundings (fresh air, sunlight, soil), pigs in crates may bar-bite, paw or nuzzle at the ground, obsessively lick the floor while in lateral recumbency, flood the pens with their drinkers and destroy feed troughs.

At one point in the footage provided a sow looks to be trying to pull the bar, dragging her mouth along it. There are sharp edges at head-height at the front end of the crate bars; these could pose a risk, and it is not uncommon for sows' mouths to bleed as a result of this stereotypy (even without the presence of sharp edges).

4. Savaging of piglets

A phenomenon observed predominantly in crated gilts (first-time mothers), is the 'savaging' of their own young shortly after birth. It can occur at staggeringly high rates, with some sources suggesting it accounts for 25% of pre-weaning piglet deaths[50], up to one anecdotally describing a case of 50% of gilt litters being savaged[51]. The following are risk factors present in farrowing crates for mothers killing, and sometimes cannibalising, their own young:

- Introduction to the crate for a first-time mother comes with both the stress of

confinement, and the stress of not being able to build a nest for her imminent first litter. Being unable to seek out and prepare a nest has been associated with acute stress hormone secretion in gilts.

- Limited space and poor pen conditions.
- A lack of high-quality nesting materials, in sufficient quantity[52].
- Larger litters or larger piglets, leading to difficulties or prolonged farrowing.
- Cross-fostering piglets (removal of several litters and redistributing them, usually based on piglet size).
- The noise of other piglets and sows, and human interference.
- Altered feeding patterns.
- Excess body fat due to feeding and lack of ability to exercise. A lack of muscle tone may also prolong farrowing.
- No exposure to normal mothering behaviour, which would occur in the wild within their mixed-age group.
- Difficulty thermoregulating, as she cannot move to seek alternative temperatures.
- Certain genetic lines may have inadvertently selected for this trait in a push for productivity.

In a National Animal Disease Service (NADIS) bulletin[51] on 'savaging' of gilt litters, Mark White, pig veterinarian and twice president of the Pig Veterinary Society, explains that the first time being confined can cause gilts to become *"extremely agitated"*.

Suggested mitigation measures include sedation, muzzling of gilts and introduction of a single rabbit to the pen before farrowing to get them used to small animals. Industry platform, The Pig Site, suggests the use of sedative drugs or an anti-convulsant which *"has the effect of reducing hysteria and nervousness"*, recognising the effect of this system on mothers[53]. It must be noted that using pharmaceuticals to 'calm' the gilt or sow tends to only delay the stress behaviour.

Pigs have been shown to experience emotional contagion[54], which means that negative emotional states can pass between pigs, and they are sensitive to sounds and smells even if they cannot see each other or have physical contact. They can also learn and remember aversive events, like being caged, giving birth to piglets who are painfully mutilated or killed in front of them, and then taken at a very young age. Thus, if one gilt savages her litter within a farrowing house, it can trigger others to do the same.

5. Anorexia and apathy

Sometimes a sow will develop injuries or illnesses that result in a loss of condition in the farrowing crate, or have so many piglets from which she cannot move away, that lactation takes its toll on her body. Occasionally, a loss of condition occurs from 'idiopathic' anorexia[55] — the sow stops eating for no apparent physical reason, but more likely psychological. **Misery and apathy are very apparent working with crated sows**, and some will simply lie there until they have to be dragged out to be shot when their piglets are weaned. I witnessed many of these cases during my time on pig farms.

How did we get here?

Given the sheer scale of suffering, and undeniably negative impact on the animals affected, it begs the question: how did we get here?

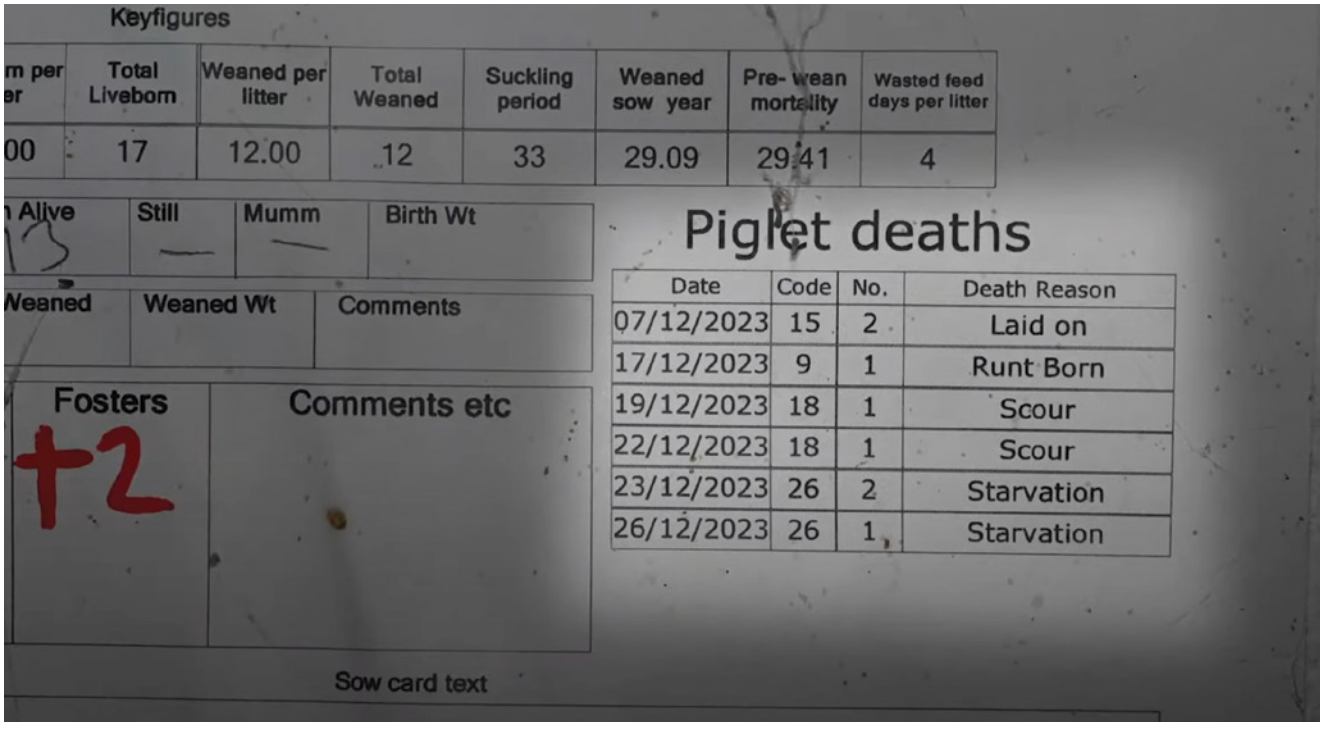
Crates were introduced to improve ease of husbandry tasks, worker safety and, at the time, piglet mortality, but such justifications fail under scrutiny, and do not compensate for the morbidity and mortality caused by the farrowing system.

With these justifications in mind, Dr Brough continues her data-driven commentary, comparing industry arguments in favour of farrowing crates with the harsh reality.

Health and safety

As piglets are routinely handled without care, and mutilated in an extremely painful and stressful manner, their screams emitted during this process can trigger the sow to want to defend them. I have seen sows try desperately to turn around and escape the crate when doing 'litter clipping', and develop a tendency to jump and try to reach workers when they come near their piglets after that. The solution to avoiding attack from protective mothers is not to cage the mother, but to cease causing deliberate, unnecessary harm to her and her piglets.

Tasks involving the sow herself, such as vaccinating, tending to wounds, and treating for disease, can sometimes in fact be made more dangerous by the presence of crates. There is potential for workers' arms to become trapped and crushed between a stressed 250kg animal and a metal bar, compared to being able to move out of the way of her reacting to an injection or topical treatment. There is always the option of temporary restraint, as is used for blood samples or treating non-breeding pigs, for veterinary intervention without the presence of a crate.



The rearing herd are affected by farrowing crates in ways that have knock-on effects for public health too, not only workers. Piglets are unable to forage in the earth, lack social integration skills and are weaned at a fraction of their natural weaning age. Effects on their gut development, adaptation to large groups and social hierarchies once weaned, and weakened immune systems, mean that more antibiotics are used in this sector than any other.

Piglet mortality

Crushing of piglets by the sow is cited as a major concern by the industry. Because sows cannot move during their time in the crates, they lose muscle tone. The musculoskeletal strength required to get up and down at speed in a confined space for a large quadruped is high; by the time she is able to adjust or get up, the piglet may be beyond saving, and she may not even realise she is crushing a piglet, given the inability to see where they are when not near her head. With this inability to see or move quickly, piglets can be easily accidentally trodden on, or trapped between the bars and the sow's hoof, causing severe lacerations.

Conversely, in nature, sows build naturally protective nests; structures designed to be cushioned, and to allow piglets to escape when the sow lies down. A record 255kg of plant material was found in a single nest of a free-range sow in Brazil[56], evidencing the care that goes into this maternal behaviour. These are some of the most intelligent animals on earth, they do not require our interference to intuitively care for young.

Having been privy to countless medicines and mortality records, I would suggest that relying on farmer-recorded data for piglet mortality could be flawed with respect to crushing. Piglets found dead may be recorded as crushed when post-mortem injury has occurred or no obvious answer is apparent as to what disease or starvation or stress has killed them, therefore potentially rendering this excuse for continued crating invalid.

Stillbirth, piglets suffocating in foetal membranes as a result of the sow being unable to turn around, savaging, starvation and disease appear to be more prevalent causes of piglet

deaths in crated sows than free range, with crushing being just one of those many risks. The resulting average pre-weaning mortality rate is higher in the indoor herd than outdoor, as referenced by Dr McCulloch.

Sow morbidity

Further to the aforementioned loss of muscle tone, musculoskeletal issues are extremely common in crated sows. Lying on hard floors with no comfort or chance to move can cause nerve damage, joint pain and pressure sores. Decubital shoulder ulcers, up to 10cm in diameter, are common, and can be deep and severe enough to require culling at the end of lactation. I have seen sows unable to get up and walk at weaning, and severe injuries to limbs, spines and vulvas caused by the crate as they can become trapped or slip when trying to move.

Rectal, vaginal and uterine prolapse appears to be more of an issue in crates, with a loss of tone in supporting muscles developing over the crated period. If the sow is still able to urinate and defecate, it is not uncommon to leave them untreated until the piglets are weaned, at which point she is culled on farm in usually an extremely poor state.

Mastitis (udder infection) also appears to be more of a problem in indoor, crated sows, than outdoor. In the footage provided of the farm investigated, there is already a significant build-up

of dust, cobwebs and flies, with piglets still very young. Contributing factors to the development of mastitis are stress, constipation and a build-up of gut endotoxins (which can be due to lack of movement and irregular high energy feed intake), hygiene, flies and udder damage[57].

As the sow cannot move away from piglets, she can be over-suckled or can seek to lie on her front, risking damage and contamination to the teats. Piglets have no enrichment and are not performing natural rooting and foraging behaviours, so may seek to nurse more for comfort and to satiate hunger.

Workers can usually scrape out the section of floor behind the sow, but it only removes some of the organic matter, leaving still an unhygienic environment for sow and piglets. Injuries and sores sustained in crates don't tend to heal well until they are removed to clean, bedded pens. Use of extremely toxic fly bait is common in farrowing houses, along with fly paper to try and combat the inevitable infestation, as can be seen building in the footage.

Farrowing houses are usually cleaned and disinfected between batches, and some of these disinfectants can cause skin irritation and are known to contribute to mastitis if not rinsed off thoroughly. A complete lack of comfort, along with numerous other disturbances, affects sleep quality, and all these chronic stressors can lead to a compromised immune system and subsequent disease.

Photo: Animal Equality | Aitor Garmendia

Sow and gilt mortality

Average sow and gilt mortality rates[58]:

Indoor:	7.7%
Outdoor:	6.4%

One of the most common reasons for sow mortality, including euthanasia, is musculoskeletal disorder. A report from 2009 stated that *'Leg problems have previously been identified as a major cause of loss in some herds, contributing 50 to 70 per cent of all deaths (usually by euthanasia)*', and noted that mortality at the time in indoor herds was double that of outdoor; slatted flooring, compared with straw-based systems, was also associated with markedly higher mortality, as was a larger herd[59]. Sow mortality has significantly increased in recent years, in conjunction with productivity.

Replacement rates (percentage of breeding herd replaced each year):

Indoor:	53.5%
Outdoor:	45.0%

The replacement rate being higher in indoor herds than outdoor may be due to musculoskeletal issues like leg weakness, reproductive failure, prolapse, mastitis and loss of functional teats.

Using the estimated 200,000 sows in crates per year in the UK, and the indoor replacement rate above, over 106,000 new mothers are introduced to crates each year, destined to spend the next few years in repeated cycles of insemination, pregnancy and crating.

A push for productivity

Genetic adjustments for improved productivity come with unintended traits and their subsequent consequences that have historically gone largely unchecked in the pig sector. There are strong genetic components to some of the worst

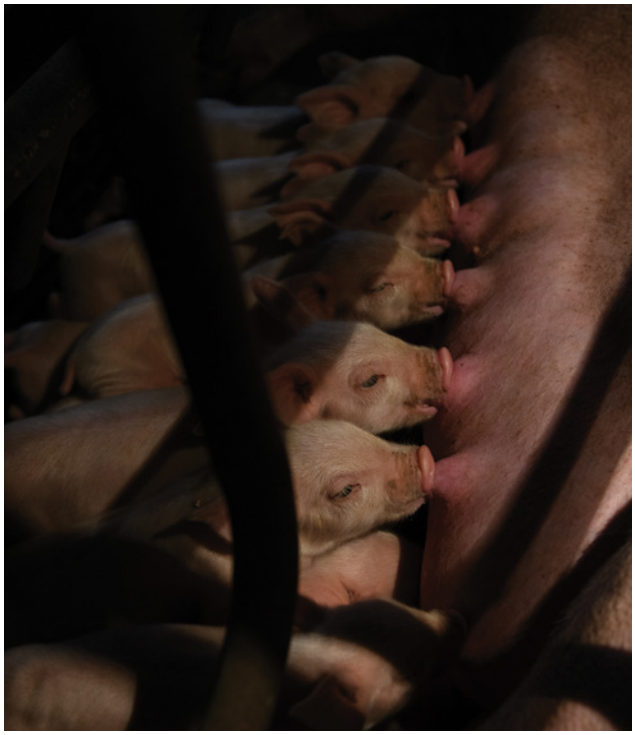
problems faced by pigs in the industry, but these are very much exacerbated by the environments they are forced to live in.

The top 10% of UK herds average around 16 piglets born alive per litter, reportedly reaching 18.4 in recent years[60]. It is now not unusual to see litters of over 20 piglets in the UK, while sows have, at best, 14-16 functional teats. A sow, of the most-used genetic line globally, in Brazil has reportedly given birth to a litter of 45 piglets in 2025[61]. This level of productivity is a false economy for the producer, leading to greater piglet losses, and potential for earlier sow culling due to loss of condition throughout lactation.

This increased prolificacy has led to an increased use of teeth reduction to prevent necrotic facial and udder lesions occurring as a result of piglets fighting over teats, with not enough milk to go around and starvation common in smaller piglets. **Conversely, when outdoors in natural conditions, piglets will begin rooting early, for exploration, comfort, temperature regulation and supplementing their diet, gaining nutrients from soil and foraged items; these positive behaviours mean they are less likely to fight over teats with the same ferocity**.

When indoors, an inability to perform natural behaviours can lead to nutrient deficiencies — most, if not all, indoor piglets receive iron injections — and irritability. A lack of enrichment, space for play, proper interaction with their mother and other piglets, and the inability of the sow to move away from her piglets or 'discipline' them, I would suggest all lead to increased incidence of facial and udder necrosis.

Observed frequently in undercover investigations is apparent routine, illegal, non-emergency killing of 'smalls' through manual blunt force trauma. This may be in part due to hyper-prolificacy, and increased prevalence of starvation and disease in litters from crated sows.



Professor Christianne Glossop OBE, Wales' Chief Veterinary Officer 2005-2022 who worked in the pig industry, stated in October 2024[62]: *"This is not a new debate, and much husbandry research over the years has attempted to develop a farrowing system which achieves the balance between sow and piglet welfare."*

Despite industry, and indeed government, assertions that crates protect piglets, there is no balance to be struck between the welfare of sow and piglet; one being improved does not worsen the other — they are inextricably linked.

Breeding sows have been modified over the years to produce a better 'meat' pig, genetically selecting for rapid growth rates. Unfortunately, this means that the sow will also grow rapidly, and ultimately become a larger pig than some of the current farrowing accommodation allows for, as systems can be decades old. With even less room to adjust her body position, and sometimes being pressed on all sides by the metal bars, as Dr Lambert has already mentioned, the sow can develop injuries and pressure sores.

Photo: Animal Equality | Aitor Garmendia

Other cage systems used on farms

It is clear that farrowing crates are unacceptable, so you might be wondering: Are other cage types as problematic? Shining a light on other cage systems used to restrain pigs around the world today, Dr Brough briefly considers pig crating practices and their impacts.

Gestation crates

Gestation crates, or sow stalls, were banned in the UK in 1999 due to widespread recognition of their welfare implications. Their construction is essentially the same as a farrowing crate, without the space for piglets, and therefore the move away from farrowing crates ought to have been the natural follow-on. **Farrowing crates carry the same ethical concerns as gestation crates, with an added layer of deprivation in the sow's inability to build a nest and tend to their young**.

Rather than move in line with welfare science and societal ethical concerns, the industry and those within its grasp have a propensity to double down on invalid excuses to avoid change, while still claiming 'world-leading' animal welfare. Industry studies and anecdotal evidence can select criteria based on ease of measurement rather than their relevance to welfare, choosing physical parameters like 'performance' (growth rates) and absence of body marks (from group housing and provision of straw), which of course in isolation would advocate for re-introduction of gestation crates without taking into account any of the psychological and physical horrors they bring.

The 'temporary' confinement alternative

The farm I worked on in 2009 was already trialing temporary crating, and countless studies have now been conducted. The National Pig Association (NPA), the 'voice of the British pig industry', is still suggesting further research is needed, indicating that a transition away from crates has not been, and will not be, a priority to the industry unless enforced through legislation.

Having adjustable systems relies on trusting an industry, with a proven track record of being untrustworthy, to manage them correctly. Pig producers consistently fail to comply with legislation already in place, demonstrated by many investigations and seen almost daily for the four years I worked in the industry; there are countless incidents evidencing that adequate enrichment is not provided, spaces are overstocked, and adjustable cages are left closed on many farms.

It would be appropriate to remove the choice to confine entirely, and to provide a natural environment without the need for human provision of 'enrichment'. The industry is also now calling for more laxity in farm assurance, aiming it more at improving their position in an international market, with fewer and simpler on-farm audits[63]. Already farms are failing to meet even legal standards at the current level of inspections.

The industry has already had 26 years to adapt farrowing systems, as was the obvious next step after gestation crates, and yet they are requesting a further 20 years to phase out, with the British Veterinary Association and Pig Veterinary Society suggesting a 15 year phase-out.

Temporary crates will not address the root causes of piglet mortality, or the sow welfare concerns. Pigs would still be unable to nest or perform any of their strongly motivated natural behaviours with a temporary crating system or small indoor pens without crates. There appears to be a higher risk of piglet mortality in pens versus conventional crates, suggesting this half measure could make things worse for pigs and producers. Piglet mortality is lower outdoors,

even in systems that are still not meeting pigs' full needs, which shows how far off crates are in meeting pigs' needs[64].

Anything short of a ban on cages, in any form, undermines everything we know about pig behaviour and welfare, and permitting new cages to be built in 2025 and beyond is indefensible; they can never be fit for purpose in meeting the needs of these complex animals at a critical time of life. Farrowing crates are 'temporary confinement', and a proposal to simply adjust these systems will not lessen suffering to a sufficient extent, and still represent significant confinement and all the welfare issues that come with that. Investing in facilities that are already obsolete would cost the UK, and pigs, dearly.

According to a survey by the NPA, 46% of producers surveyed would exit the industry if they were only given five to ten years to make the transition from traditional crates to flexible farrowing systems. There is nothing that could be put in place over a 20-year period that could not be done in far fewer, given the right incentive and support. The NPA survey identified that "The two biggest drivers for change would be the provision of government financial support to make the transition and legislation forcing producers to move away from conventional crates towards flexible farrowing systems"[65].

A study dating as far back as 1991 identified that provision of nesting material reduces piglet mortality[66], yet most still don't receive it. It doesn't appear to matter how beneficial a change would be to this industry, voluntary improvements in pig welfare seldom occur and must be enforced. **It is my experience that the pig industry tends towards defending its current position, avoiding change for as long as possible without having to foot any of the costs**.

The pig industry receives significant Government and public funding, yet fails to deliver a product in line with public morality. More broadly, in line with climate and nature targets, especially around land use and emissions, supporting 60% of the pig industry (the proportion currently using crates) to transition to nature-friendly plant-based farming or rewilding would be a positive step towards a sustainable and cruelty-free food system. Additionally, a shift to temporary crating — an unnecessary extra step — will double up on construction required in the long term, increasing the industry's already disproportionately large carbon footprint. This would be a ludicrous half-measure in this pivotal moment.

Photo: Animal Equality | Aitor Garmendia

What can we learn from the literature?

Perspective of a veterinary specialist in animal welfare science, ethics, and law

The science is clear: farrowing crates have a detrimental impact on mother pigs. Pigs are a highly sentient, intelligent and social species, and farrowing crates cause the most severe degree of confinement of any farming system in the UK. As the images throughout this report illustrate, pigs used for breeding ('breeding pigs' or 'sows') are able to stand up and lie down, but they are unable even to turn round.

Farrowing crates fall hopelessly short of meeting the welfare needs of pigs, which is well established in the scientific literature and summarised below[67,68]. Due to their severe welfare impact on sows, Norway, Sweden, Switzerland, Germany, Austria, and New Zealand have introduced full or partial bans on farrowing crates[69].

As referenced earlier in this report, in the UK 60% of the breeding herd — around 200,000 sows — are kept indoors, and almost all of these are confined in crates around the 'farrowing' (birthing) period. Farrowing and lactating sows are kept in crates for five weeks each litter.

On average, given that pigs produce two or more litters per year, this means that they are crated for around 80 days per year, or nearly a quarter of their adult breeding lives[70]. This is a major problem for British food and farming, as well as the welfare of pigs. That is because over half of British pork and bacon is produced from breeding sows kept in crates, which the veterinary profession, animal welfare scientists, and even the UK Government have acknowledged do not meet their welfare needs[71,72,73]. And if the welfare needs of sows who produce piglets for fattening are not met, it raises serious questions about the ethics of consuming British pork and bacon produced from all indoor farms using farrowing crates[74,75].

Below, Veterinary Specialist Dr McCulloch provides an overview of the current UK context and recommendations for the Government to take action based on his published research.

Dr Steven McCulloch

Dr McCulloch is a European Veterinary Specialist in Animal Welfare Science, Ethics, and Law, and Fellow of the Royal College of Veterinary Surgeons. He holds a PhD on UK government policy making and the interests of sentient species. He has expertise in animal welfare, ethics, law, and policy with a multidisciplinary background. His primary academic focus is on research and knowledge exchange to promote the protection of farmed animals.

Piglet mortality: a smokescreen for low-cost production?

The UK claims to be a global leader in animal welfare. For this reason, given that farrowing crates clearly cannot meet the welfare needs of sows, it may come as a surprise that they continue to be legally permitted. Having published a report on farrowing crates in 2022[76] I would suggest that there are two key reasons for their continued use.

The first reason is that the pig industry has claimed that farrowing crates are necessary to reduce piglet mortality. But this is simply not true, as Dr Brough too has highlighted. Piglet mortality is comparable and, in some cases, lower for UK outdoor sows, nations like Switzerland with a full legislative ban in place, and for the DEFRA-funded PigSAFE free farrowing pen[77]. Furthermore, the critical period for piglet mortality is just 72 hours after birth[78]. Despite this, lactating sows are confined in crates for five weeks each litter.

In the UK, 40% of sows farrow freely outdoors, which has been described by leading experts as 'the gold standard' for a farrowing system (Baxter et al., 2011). DEFRA data between 2006 and 2021 reveals that total piglet mortality is lower for outdoor farrowing (11.9%) compared to indoor farrowing (13.2%) using the farrowing crate[79].

Furthermore, data from Switzerland reveals there has been no significant change in piglet mortality levels since the ban was brought into effect in 2007. Recent commercial live-born mortality figures for Switzerland (11.1%) and Norway (12.0%) are comparable, and indeed lower, than the mortality figure for the UK[80].

Finally, Piglet and Sow Alternative Farrowing Environment (PigSAFE) is a DEFRA-funded zero confinement system designed by researchers at Scotland's Rural College (SRUC) and Newcastle University. The PigSAFE system is designed to meet the biological needs and welfare of sows and achieves comparable piglet mortality levels to the farrowing crate[81].

Given that piglet mortality figures are comparable and often lower in free farrowing systems, and that the critical period for piglet mortality is for just three days after birth, the principal 'benefit' of farrowing crates is not to reduce piglet mortality, but to minimise production costs[82].

Photo: Animal Equality | Aitor Garmendia

The figures above clearly support this, and UK Government policy must reflect such evidence and fully prohibit farrowing crates. And regardless of piglet mortality figures, neither the UK Government, nor any society, should permit in law practices that cannot provide for the welfare needs of sentient farmed animals.

Public awareness brings public opposition

The second reason farrowing crates continue to exist relates to the British public's lack of awareness that breeding pigs are kept in such extreme confinement. In a 2023 Survation poll, 63% of UK respondents had not heard of farrowing crates; 14% had heard of them but didn't know much, if anything, about them; and 16% had heard of them and knew a little about them[83]. Only 6% of respondents had heard of farrowing crates and knew a lot about them.

Hence, nearly four in five (77%) of the British public are unaware that 60% of the UK's breeding pig herd are confined in crates for nearly 25% of their breeding lives, such that they are not even able to turn round. But when the same poll provided a neutral description of what farrowing crates are, together with the pig industry's justification based on piglet mortality, fewer than one in five supported their continued use. In this context, it is regrettable, though perhaps understandable, that the British pork industry lobbies aggressively against the use of method of production labelling for pork and bacon, which would provide information to consumers at the point of purchase about the use of crates[84]. Elsewhere, I have reported how the British public demonstrates 'supermajority' (>67%) support for substantially higher welfare standards[85]. For instance, 77% support a ban on cages for farmed animals and 68% support method of production labelling for meat and dairy[86,87,88].

Photo: Animal Equality | Aitor Garmendia

The British public consistently demonstrates very progressive views on animal welfare, and farrowing crates, as cages causing severe confinement, are not compatible with public opinion.

The Government's duty to protect animal welfare

In its landmark report, 'Farm Animal Welfare in Britain: Past, Present and Future', the Farm Animal Welfare Council (FAWC) stated that the Government has a 'guardianship' role to protect animal welfare[89]. In the same 2009 report, FAWC stated that government policy must be that all farmed animals have, at the very least, 'a life worth living', defined as the sum of positive experiences outweighing negative experiences. Indeed, it is surely an indictment for any government or society to permit in law a system which does not provide for the welfare needs of sentient farmed animals, such that they do not even have a life worth living.

In this context, **farrowing crates manifestly violate all five welfare needs under Section 9 of the Animal Welfare Act in England and Wales**. Furthermore, they do not provide space appropriate for the physiological and behavioural needs of breeding pigs, therefore they are not compatible with Schedule 1(10) of the Welfare of Farmed Animals (England) Regulations 2007. Farrowing crates do not provide for the welfare needs of breeding sows, they cannot provide for a life worth living, and they are incompatible with the major provisions of key UK legislation, as devolved, that exists to protect farmed animals.

Despite the current lack of British public awareness of farrowing crates, UK-based NGOs are currently focusing more attention on them, for instance through 'The Crate Escape' campaign, comprising

the Conservative Animal Welfare Foundation, Humane World for Animals (UK), and Compassion in World Farming[90], as well as this Animal Equality UK report. For this reason, given the extreme confinement that crates cause, going forward there will surely be increasing public discontent around the British pig industry's use of farrowing crates.

I expect that Government ministers, legislators and the British public can quite clearly see that farrowing crates cannot meet the welfare needs of pregnant and lactating sows. **One does not need to have expertise in animal welfare to see that the extreme degree of confinement is simply incompatible with meeting basic welfare needs**. This is because of the severe physical and behavioural restrictions that the metal enclosure of crates causes to sentient pigs.

At the same time, an appreciation of the pig's natural behaviour and biology helps provide a deeper understanding of the extent to which sows suffer in farrowing crates, and this is a conclusion firmly supported in the scientific literature.

Natural behaviour around farrowing and lactation

Despite pigs being domesticated around 10,000 years ago, selection has mostly focused on production traits and has not significantly changed the behaviour of pigs around farrowing. For instance, Stolba and Wood-Gush (1989) released domestic pigs into a semi-natural environment and found that their behaviour in general reverted to that seen in wild boar[91].

Jensen (1986) similarly observed the farrowing and maternal behaviours of domestic pigs released into free range conditions[92]. In more general terms, Held, Cooper and Mendl (2009) report that modern domesticated pigs are similar, cognitively and behaviourally, to the wild boars they have evolved from[93].

The following account of a pig's natural behaviour around farrowing is based on Jensen (1986, 2002), Stolba and Wood-Gush (1989) and Baxter et al (2018)[94,95,96,97]. Jensen (1968) has described six distinct phases of maternal behaviour in free-ranging domesticated pigs[98]:

Photo: Animal Equality | Aitor Garmendia

- Nest-site seeking
- Nest-building
- Farrowing
- Nest-occupation
- Social integration of piglets
- Weaning

Sows typically live in herds of 2-6 female pigs.

- Around 24 hours prior to farrowing, sows leave their group and often wander for many kilometres to find a suitable nest site.
- After choosing a site, the sow then spends significant time building an elaborate nest made of grass, ferns and twigs. The nest is constructed by rooting and digging to produce a concave structure within the earth. The nesting behaviours are considered to have the evolutionary purpose of maximising survival of the newborn piglets, away from predators, disease, and competition for teats from older piglets[99].
- In free range conditions, sows produce litters of 10 or more piglets over the course of 4-6 hours. During farrowing, the sows often turn round and perform nose-to-nose behaviour with their newly born piglets.

- Once farrowing is complete, the piglets suckle at regular intervals and a teat order is established, with piglets suckling from the same teat at each feeding.
- During the first week, the sow and her piglets spend most of their time in the nest, with the sow occasionally leaving the nest to forage for food. After the first week, the piglets often follow the sow to forage locally. And at around 10-14 days, the sow and her piglets abandon the nest and rejoin the group. At this point, the sow will interact with other sows in the group, and her piglets will interact with those from other litters. Piglets begin foraging from around five days, and weaning is a slow and gradual process, with final milk intake at around three months.

The prevention of strongly motivated behaviours

With an understanding of the biology of the sow, we can form a better picture of the extent to which she is deprived of her fundamental welfare needs and, therefore, the degree to which she suffers through extreme confinement. The natural behaviours described above are innate, hormonally controlled and strongly motivated, the thwarting of which causes psychological suffering[100].

On British indoor intensive pig farms, sows are moved into crates around one week prior to farrowing. The extreme confinement thwarts the sow's strong internal motivation to wander kilometres to locate a preferred nest site. Crated sows are kept on partially or fully slatted hard flooring, so they are generally not provided with straw or other suitable material to build a nest. Nest building in sows in particular is a strongly motivated behaviour, the prevention of which leads to frustration and suffering[101].

During and after farrowing, the sow is not able to meaningfully interact with her piglets. As referenced by Dr Helen Lambert, a sow's natural inclinations to forage during the first week after farrowing, and spend some time away from her piglets, are unable to be satisfied. Whereas in more natural or extensive conditions, the sow and her piglets would leave the nest at 10-14 days[102,103]; the restrictive farrowing crate precludes this. Both the sow and her piglets during this phase would explore their environment and interact with other sows and piglets from other litters respectively. These behaviours are important for the welfare of the sow and her piglets and, for piglets, considered to be important for developmental purposes[104,105]. The restrictive and barren environment of the farrowing crate and pen

Photo: Animal Equality | Aitor Garmendia

prevents the lactating sow and her piglets performing these behaviours. Finally, while piglets would slowly and gradually reduce milk intake until full weaning between two and three months[106,107], on intensive indoor UK farms the piglets are abruptly removed from the sow at the age of four weeks.

European Food Safety Authority recommendation to ban farrowing crates

The European Food Safety Authority (EFSA) is an independent scientific body that provides the EU Commission with expert advice on food-related risks, including animal welfare, from farm to fork. EFSA reports apply risk assessments to animal welfare and are considered to be highly authoritative by the international scientific and veterinary communities. In its 2007 report on housing and husbandry systems, EFSA concluded[108]:

> ***'Housing of sows in farrowing crates severely restricts their freedom of movement which increases the risk of frustration. It does not allow them, for instance, to select a nest site, to show normal nest-building behaviour, to leave the nest site for eliminative behaviour or to select pen areas with a cool floor to thermoregulate.'***

Photo: Animal Equality | Aitor Garmendia

A more recent 2022 EFSA report identified the following 'highly relevant' welfare consequences of individual crates: restriction of movement, resting problems, group stress, inability to perform exploratory or foraging behaviour, inability to express maternal behaviour, heat stress and soft tissue lesions and skin damage[109]. It is important to note that, in the same report, EFSA found no welfare consequences that were of high relevance to the sows for the alternative systems of individual farrowing pens and outdoor farrowing systems.

Impacts on animal welfare can be classified by severity, prevalence, and duration[110,111]. For the highly relevant welfare consequence of restriction of movement, EFSA reports[112]:

> ***'The sow cannot turn around nor adopt certain body postures causing serious movement restriction (high severity). All farrowing and lactating sows housed in this type of system suffer from restriction of movement (high prevalence) and this is a non-interrupted welfare consequence for the time they are kept in crates (long duration).'***

In the report, EFSA compared farrowing crates with individual pens and outdoor paddock systems. For these systems, EFSA found that though there were some less important welfare consequences, for animal welfare reasons, pigs giving birth and lactating sows should be housed in farrowing pens, not farrowing crates[113]. The report further recommended that sows and gilts should be provided with material to enable nest-building behaviour at least one day prior to farrowing.

Farrowing crates therefore cause suffering that is severe, that affects all sows kept in crates, and that sows experience for a long duration for each of their two to three litters each year. Furthermore, given what we know about the cognitive and emotional complexity of pigs, and the severe stresses that prolonged confinement causes to sows, **their suffering is not likely to come to an end once the sow is freed from her crate[114]. In effect, breeding sows are very likely to suffer from post-traumatic stress disorder once they have been removed from the farrowing crates at weaning[115,116].**

A farmer's perspective

The experts have spoken, but they are not the only ones to express support for a ban on farrowing crates. Veterinarians, members of the public, and many farmers have spoken out against this extreme confinement.

Swiss pig breeder, Peter Anderhub[117], transitioned away from using farrowing crates following a ban of these cages in Switzerland that came into force in 2007. He briefly shares his experience below.

Did you use farrowing crates initially?

In the beginning, I had farrowing crates in the leased barns. After they were banned, I opened the crates up to comply with animal welfare legislation until planning permission was granted for the replacement building in 2011.

A case against 'free-farrowing' temporary crates

The mother pigs grew larger over time. The temporary farrowing pens, where the mother pigs were able to move around freely, were too small to function well. This was particularly reflected in the untidiness of the pens. Piglet losses were about the same as with closed farrowing crates. Solutions with free-farrowing in pens under 7m^3 do not work well! When farrowing crates are used, more attention is paid to the farm manager/caretaker (workload) or consumer (cheap meat) than the animals.

Associated costs

A farrowing pen cost around 20,000 Swiss Francs per pen at the time I transitioned, the equivalent of circa £18,000 according to today's currency conversion rates. I would advise farmers to speak to pig housing equipment manufacturers and provide more space than the minimum required.

PETER ANDERHUB Swiss pig breeder

Photo: Animal Equality | Aitor Garmendia

A view from overseas

In October 2024, the UK Government promised to introduce the "most ambitious programme for animal welfare in a generation". A ban on farrowing crates for pigs must fall into this programme. Failing to do so risks the UK's reputation as a world leader in animal welfare and its legislative ranking on the world stage.

Farrowing crates are already banned in Sweden (1988), Norway (2000), and Switzerland (2007), and more bans are in the making. A court in New Zealand determined farrowing crates to be unlawful, prompting the Government to announce plans to phase-out crates by 2025. Austria has a partial ban in motion, which will come into effect in 2033, as does Germany, effective 2035[118].

Below, leading organisations from around the world share their perspectives and recommendations.

🇸🇪 Support from Sweden:

The current Swedish legal requirement for sows to be kept loose was established in Sweden with the implementation of a new Animal Welfare Act in 1988. The preparatory work (Proposition 1987/88:939) for the new Animal Welfare Act, of the government at the time, stated that systems whereby animals are restrained for long periods cannot be considered compatible with the requirement that animal husbandry should meet the natural behavioural needs of the animals. It was concluded that the system of keeping sows in crates should be ended. The Animal Welfare Act was introduced in 1988 after an intense ethical debate on modern animal production and its production techniques. In the public debate, factory farms had been criticised for being primarily technology-driven and not taking into account the natural behaviour of animals. According to the government and the Minister of Agriculture at the time, animal farming should not be organised solely according to short-term economic criteria, without regard to animal welfare. They argued that the farming environments should be adapted to the biological conditions of the animals.

A clear ban on tethering pigs was introduced in Sweden in 1982. At that time, there was no ban on the use of crates, but that ban was soon to be introduced. The requirement for pigs to be kept loose, i.e. they were not allowed to be kept in crates either, was introduced in the former Swedish Animal Welfare Ordinance (1988:539) and remains in the current Animal Welfare Ordinance (2019:66). The animal welfare legislation in 1988 meant a prohibition of long-term keeping of pigs in crates. However, the legislation did, and does, allow keeping of pigs in crates temporarily. Details in the regulations have since 1988 been modified and partly moved to the regulations of the Swedish Board of Agriculture. Over the years, the legislation has been amended to clarify that keeping sows in crates must not be systematic and that the time in crates must be limited.

Although there is a legal requirement for pigs to be kept loose, restraining devices for pigs, such as crates but not tethering, may still be used temporarily under certain circumstances. According to detailed regulations by the Swedish Board of Agriculture, the freedom of movement

of a lactating sow may be restricted during the piglets' first days of life by using a so-called safety gate or equivalent device (cage), if she expresses aggressive or abnormal behavior that poses an obvious risk of injury to the piglets.

A safety gate or equivalent device may also be used during the daily management if the behaviour of the sow constitutes an obvious risk of injury to the animal handler, and when the sow is handled for care and treatment. Grouped sows and gilts may be locked in stalls when they are handled for care and treatment, as well as when they are fed. In the guidance documents produced for the animal welfare legislation inspectors, it is stated that the use of so-called safety gates should be as short as possible during the piglets' first days of life and that it is not possible to specify in advance exactly how long the need to confine a sow may be, but that longer than 2-3 days hardly is justified except in exceptional cases.

I would say that there is strong support for the Swedish legal requirement that pigs as a general rule should be kept loose, among the public, politicians, authorities and within the pig industry. In a recent report on animal welfare and Swedish competitiveness[119] commissioned by the Government, the investigator concluded that it is not an issue to return to allowing the keeping of pigs in crates in Sweden. However, there are occasional calls from factory farming lobby groups about allowing caging of sows in Sweden to a greater extent than what is allowed today. An indication of this is that research[120] on caging of pigs, funded by the animal farming industry, in recent years has been conducted at the Swedish University of Agricultural Sciences.

The question of whether to keep pigs in cages should not be a relevant question to be asked at all. To keep pigs in cages or in other ways restrict their freedom of movement, so that they can only stand up and lie down, with strictly limited opportunities to interact adequately and satisfactorily with their young and other individuals and with no possibility to express their natural behaviour such as nest building, is completely unacceptable from an animal welfare perspective. Any problems involving piglet mortality must be addressed and solved in ways other than confinement of the sow. Breeding for large litters increases the risk of small and weak piglets being born and affects the survival rate. Starvation is often cited as a major cause of piglet death. Caging itself contributes to piglet mortality because it negatively affects the welfare of the sow and thus also her ability to suckle and care for the piglets.

Restricting the movement of an animal in the way that both tethering and crating of pigs do severely restricts the animal's ability to perform their natural behaviours, which is a fundamental part of animal welfare. It is certainly time for the EU, UK, and other countries to ban once and for all, the completely outdated and unacceptable practice of keeping pigs in cages.

LINDA BJÖRKLUND Animal Welfare Specialist and Ethologist, Project 1882 (Sweden)

A note from Norway:

"The routine use of farrowing crates has been illegal in Norway for nearly 25 years. Until 2025, fixation was permitted in exceptional cases, for a maximum of seven days. The Norwegian Parliament has now decided to abolish this exemption, meaning that from 2028 onward all use of farrowing crates will be prohibited by law. We urge the United Kingdom to be inspired by our example. No animal should be forced to give birth confined in a crate!"

HELLE HAUKVIK Head of Science & Veterinarian, Dyrevernalliansen (Norway)

A statement from Switzerland:

In Switzerland, there are protections for farmed pigs that are enshrined in constitutional law, but these laws are not absolute; 'overriding (usually human) interests' may encroach on them. Therefore, if any strain imposed on the animal cannot be justified by overriding interests, this constitutes a disregard by law for the animal's dignity. Strain is deemed to be present in particular if, for example, unnecessary pain, suffering or harm is inflicted on the animal; if the animal is exposed to anxiety or humiliation; or if there is major interference with the animals' appearance/abilities.

The following legislation applies to pigs in Switzerland:

- Animal Welfare Act (AniWA) of 16th December 2005[121].
- Animal Protection Ordinance (AniPO) of 23rd April 2008[122].
- Ordinance of the FSVO on the keeping of farm and domestic animals of 27th August 2008[123].
- FDHA Ordinance on Training in Animal Husbandry and Handling of Animals (Animal Welfare Training Ordinance, AWTO) of 5th September 2008[124].

In accordance with Article 44 AniPO, pigs must have access at all times to straw, roughage or other equivalent foraging material. Pigs must be kept in groups (with some exceptions[125]) and all pigs are prohibited from being tethered[126].

Crates for sows may only be used during the mating period and at most for ten days (Article. 48, para 4, AniPo). However, they are not allowed during the birth process, nor while nursing (exception see below). Breeding boars and pigs for 'fattening' must not be kept in crates at all. This ban was passed in 1997 and came into force in 2007.

When briefly used, such crates must have the following dimensions: 190 x 65 cm. Farrowing pens must be designed so that the sow can turn around freely. During the birthing phase, the sow may be individually restrained but only from the onset of nest-building behaviour until no later than the end of the third day following the birth. A record must be kept of which sow was restrained and for what reason[127].

The animals' breeds may differ across countries, for example in the area of cytogenetics (genetic makeup). Since Switzerland has had a ban on gestation crates for some time, breeders in this country have placed a greater emphasis on sows having good mothering skills and strong limbs[128]. This allows the sows to farrow freely (i.e. to give birth to their offspring) and to move around in the piglet pens. In the EU, breeders did not consider these characteristics to be important because they were of no use to them when the sows were kept in farrowing crates.

The Swiss agricultural industry has come to terms with the ban on farrowing crates. Although farmers initially always opposed all innovations, they are now proud of the fact that their pigs can farrow freely and emphasise this at every opportunity[129].

According to discussions with farmers, the maximum permitted time in the crate is usually not used during the breeding season. In many cases, pigs seem to be confined only very briefly, so a ten-day period is therefore redundant.

As early as 1996, it was shown in the context of the development of farrowing pens without farrowing crates that, firstly, there are no more piglet losses and, secondly, the investment costs are hardly higher than for the infrastructures that were common at the time (with farrowing crates). In economic terms, it therefore does not matter — so why choose the cruellest option?

We very much hope that the current efforts in the UK and other countries will be successful and that pigs everywhere will be out of these cruel and undignified cages.

DR VANESSA GERRITSEN Member of the Executive Board, Stiftung für das Tier im Recht (Switzerland)

Conclusion

The Brambell report, published in 1965, stated that all farmed animals should have the freedom to be able to, without difficulty, 'turn round, groom itself, get up, lie down, and stretch'[130]. Yet, sixty years on from the Brambell report, mother pigs in Britain continue to be kept in such extreme confinement that they not only cannot turn round and groom themselves, but they are unable to perform almost all of their natural behaviours. This cannot continue.

A significant proportion of research available is geared towards highlighting benefits to producers and industry; well-meaning researchers desperately try to present convincing financial, convenience, and production improvements. But at what cost? Citing 'competing needs' of the supply chain and the pigs is where we go wrong in deciding what is morally acceptable to inflict on animals we have chosen to domesticate[131]. However, despite these hurdles that many academics face, the evidence against the use of farrowing crates is nonetheless compelling and overwhelming.

From birth to death, pigs in industrial farming experience immense suffering, but perhaps none more so than mother pigs. Bred repeatedly, hundreds of thousands will spend years of their lives confined in a crate so small they cannot even turn around. Each mother will have her piglets taken from her, only to face painful mutilations like tail-docking and teeth-clipping. She is reduced to a breeding machine, her needs ignored, her instincts denied. There is no comfort, no natural social bonds, no moment of peace.

These are sentient beings, animals capable of feeling not just pain and fear, but affection, playfulness, and joy. Yet, every year, hundreds of thousands across the UK are crammed into highly restrictive cages that leave them hopeless, frustrated, and sore. Farrowing crates represent an outdated pig farming practice incompatible with animal welfare. Temporary crates are not an acceptable compromise; they merely perpetuate many of the same issues under a different guise. These systems fail both ethically and practically — they compromise pig health, do not reduce piglet mortality, and perpetuate an industrial model that prioritises industry profit and convenience.

Farrowing crates — including 'temporary' crates — are ethically indefensible, scientifically unjustified, and legally questionable. The Government must act decisively and end the use of these cages, now and forever.

Appendix: Raw data

Footage:
https://vimeo.com/956696262
https://vimeo.com/1033974847/02f5227249 (10 minute example)

Daily data, per pig

Day 1

	PIG ONE	PIG TWO	PIG THREE
Time spent sitting upright	13 minutes 34 seconds	36 minutes 58 seconds	16 minutes 48 seconds
Time spent standing up	1 hour 5 minutes 31 seconds	41 minutes 24 seconds	1 hour 4 minutes 44 seconds
Number of instances sow engaged with enrichment object	7	0	0
Number of instances sow engages in bar biting behaviour	6	8	1

Day 2

	PIG ONE	PIG TWO	PIG THREE
Time spent sitting upright	13 minutes 55 seconds	1 hour 17 minutes 40 seconds	1 hour 53 minutes 4 seconds
Time spent standing up	45 minutes 40 seconds	1 hour 19 minutes 26 seconds	2 hours 56 minutes 10 seconds
Number of instances sow engaged with enrichment object	4	5	0
Number of instances sow engages in bar biting behaviour	8	9	49

Day 3

	PIG ONE	PIG TWO	PIG THREE
Time spent sitting upright	4 minutes 29 seconds	1 hour 10 minutes 26 seconds	13 seconds
Time spent standing up	1 hour 6 minutes 42 seconds	1 hour 14 minutes 43 seconds	54 minutes 26 seconds
Number of instances sow engaged with enrichment object	13	11	0
Number of instances sow engages in bar biting behaviour	3	7	0

Day 4

	PIG ONE	PIG TWO	PIG THREE
Time spent sitting upright	8 minutes 4 seconds	1 hour 20 minutes 11 seconds	7 minutes 52 seconds
Time spent standing up	59 minutes 5 seconds	5 hours 14 minutes 38 seconds	49 minutes 23 seconds
Number of instances sow engaged with enrichment object	15	35	0
Number of instances sow engages in bar biting behaviour	1	26	0

Day 5

	PIG ONE	PIG TWO	PIG THREE
Time spent sitting upright	0 seconds	26 minutes 19 seconds	7 minutes 41 seconds
Time spent standing up	1 hour 29 minutes 13 seconds	1 hour 29 minutes 44 seconds	50 minutes 47 seconds
Number of instances sow engaged with enrichment object	9	1	0
Number of instances sow engages in bar biting behaviour	5	4	0

Five-day data, per pig

	PIG ONE	PIG TWO	PIG THREE
Time spent sitting upright	40 minutes 2 seconds (0.56%)	4 hours 51 mins 34 secs (4.05%)	2 hours 25 mins 38 sec (2.02%)
Time spent standing up	5 hours 26 minutes 11 seconds (4.52%)	9 hours 59 mins 55 sec (8.33%)	6 hours 35 mins 30 sec (5.48%)
Number of instances sow engaged with enrichment object	48	52	0
Number of instances sow engages in bar biting behaviour	23	54	50
Time spent lying down across five-day period	94.92%	87.62%	92.5%
Notable	Pig 1 did not sit up at all on the final day	Pig 2 did not engage with the enrichment at all on day one	Pig 3 did not engage with the enrichment at all across the five-day period

Five-day data, total across all pigs

- Average percentage of time spent sitting up: 2.21%
- Average percentage of time spent standing up: 6.11%
- Total number of instances sows engaged with enrichment object: 100
- Total number of instances sows engage in bar biting behaviour: 127
- Average percentage of time spent lying down: 91.68%

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