

# Summary: Group Housing Systems for Dry Sows

As of January 2013, group housing of breeding pigs (sows) after the first four weeks of pregnancy is a legal requirement in the EU. Sow stalls (metal crates used during pregnancy) are banned entirely in the UK. Other countries and food companies are making commitments to remove sow stalls and providing group housing for dry (non-lactating) sows.

## The Problem



Sow stalls are one of the most extreme examples of confinement system. Sows are kept in barren environments, only able to stand up or lie down. Extreme boredom and frustration leads to excessive stereotypic bar biting, chewing and depression. Producers used to operating with sow stalls have limited experience of keeping sows in groups effectively. There is no single blueprint for a successful group housing system, which varies according to feeding system, group size and group stability. For their successful design and management, knowledge transfer of systems and their key features is essential, along with positive

farmer attitude. Aggression can occur in any group of sows after mixing unfamiliar individuals, which is a major concern in group housing. Producers are mostly concerned about aggression after mixing (post weaning or mating) and during feeding. If not managed correctly, aggression can cause chronic stress, injury, lameness, variable body condition and return to oestrus.

## The Solution

The following are key features of effective group housing for sows:

### Providing adequate space

Insufficient space exacerbates aggression. EU legislative standards allow medium-sized sows to lie down on their side and walk to their feeders/drinkers, but are inadequate for general activity. Providing more space allows sows to move away from each other, improves welfare and reduces aggression and piglet stillbirths. More research is needed, but a high space allowance (>3m<sup>2</sup> /sow) is recommended.



### Providing solid floors and bedding



Solid floors with clean, dry straw bedding are recommended for sow housing. Compared to slatted floors, this positively impacts thermal comfort, hoof condition, lameness incidence and skin lesions. Alternative materials (e.g. rice husks, woodchip bark) may suit warmer climates. Rubber lying mats (3-5mm) improve sow comfort compared to concrete, but are not a suitable substitute to straw, which also allows foraging, rooting, and chewing behaviours.

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<http://www.compassioninworldfarming.com/media/6207971/info-3-housing-systems-for-dry-sows.pdf>

### Providing dietary fibre and manipulable material



Typically, dry (non-lactating) sows are fed a highly concentrated diet once a day, to maintain their condition without becoming too fat. However, this prevents them feeling full and does not allow them to forage for their food. It is also associated with increased aggression and stereotypic behaviour (e.g. bar-chewing in stalls). Pregnant sows and gilts are required by law (EC Directive 2001) to be provided with sufficient dietary fibre, as well as high energy food, to satisfy hunger and their motivation to chew.

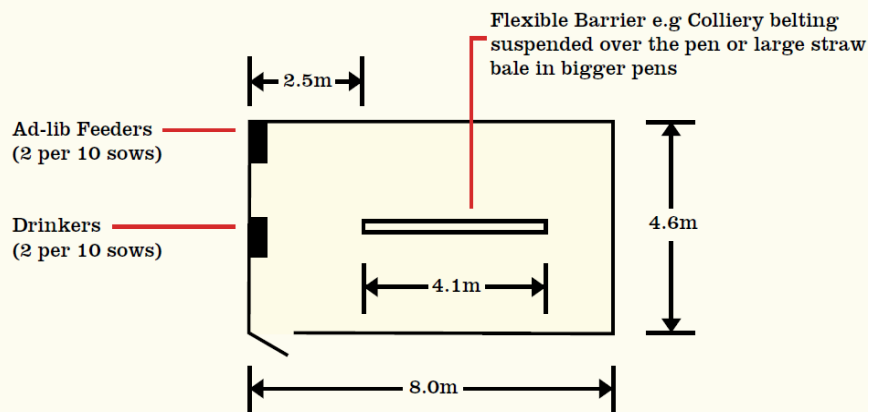
A high fibre diet during gestation also prepares gilts (young females) and sows for the high feed intake required during lactation. Providing a combination of substrate (e.g. straw, woodchip bark) and forage-based feed (e.g. maize, grass silage) will satisfy hunger, fulfil foraging and exploratory needs, reduce aggression and increase resting behaviour.



### Managing aggression

Stable grouping of sows is recommended to manage aggression. Where mixing unfamiliar individuals is unavoidable, aggression and the subsequent risk to future offspring should be minimised. Measures which can reduce aggression include: keeping a male in the group, managing feeding by providing sufficient space at feeders, preventing dominant sows from stealing food or separating individuals in feeding and post-feeding areas, gradually familiarising individuals (via fence contact), utilising a specialised mixing pen with extra space and physical barriers for hiding, and mixing individuals before the vulnerable period of week 2-3 of pregnancy.

#### Suggested layout for a mixing pen, suitable for 10 sows



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