

National Sow Housing Conversion Project Free Access Stalls



and Food Sciences

Free-access stalls are a non-competitive feeding system designed for group-housed sows and gilts. Sows enter the stalls via a back gate and a mechanism closes the gate behind them. To exit the stall, sows back into the gate which opens with the applied pressure, allowing the sow to exit. The free access system greatly reduces aggression at feeding because every sow has access to an individual stall, and can feed undisturbed. The area available to the sows outside the stalls is referred to as the loafing area. Loafing areas provide exercise and rest opportunities. Studies have shown that the design and shape of the loafing area affects how much time the sows choose to use it.

FREE ACCESS STALLS

- Balances the benefits of group housing with the protection of stalls
- Preferable to manage as static groups, possible to manage larger groups with continuous Introductions
- A significant reduction in herd capacity OR Significant increase to barn space is required when converting from stalls
- Higher capital costs required during conversion compare to ESF or competitive feed systems.
- Individual feed curves are not possible
- Little sow training is required
- Loafing area design is important for sow use
- Low levels of aggression when managed correctly

The free-access stalls balance the freedom of group housing with the protection of stalls. The quantity of feed dispensed into the troughs will be the same within each pen group, but there is opportunity for stock people to add additional feed by hand if necessary. There must be one



stall available per sow in the group. During barn conversions there may be an opportunity to use gestation stall material to create the free access stalls, which can reduce costs.

Grouping sows by parity and weight can encourage more sows to spend time in the loafing area as there are



less submissive sows in an uniform group. Spending time outside the stalls is important for the animals to obtain the benefits of improved fitness and muscle strength.

Training the sows

The majority of sows quickly

learn to use the stalls to access feed and lie undisturbed. Some sows may need training when converting to a free-access stall feeding system depending on the stall design. Observing the sows at feeding time will highlight which sows are having difficulty entering the stalls. These sows can be quickly trained by providing small amounts of feed at the entrance to the stall or using low-stress animal handling techniques to put them into the stalls.



Some sows and gilts have trouble exiting the stalls because of the pressure needed to release the rear gate. This is likely to be more common with smaller and younger sows. Options for training sows to exit the feeding stalls include:

- 1. The stockperson may lift the gate up part way and allow the sow to finish the job which will encourage the animal by showing them that the desired result is attainable.
- 2. The stockperson may use a paddle by the sows head, while exercising patience, to put pressure on the sow to encourage her to reverse. Pressure from the paddle should be released immediately when the sow starts to reverse.
- 3. Placing a board flat on top of the metal work of the stall causes a shadow over the sow's head which can be an effective method of encouraging the sow to reverse. This is a good 'hands free' low effort method to get the sow to reverse.



It is important to ensure that all sows learn how to exit the stall so the benefits of group housing can be achieved.

Additional Management Options

Free Access Stalls can be locked individually or by row to allow management practices such as vaccination or putting groups together for farrowing. Rear gate 'open and close' mechanisms vary between manufacturers, and different gate designs are available. Some gate designs provide stockperson entry for ease of access to

the sow for pregnancy scanning and Artificial Insemination. Different flooring types can be used with free access stalls, including options for rubber matting and bedding. For ease of feeding sows and gilts should be grouped by parity, weight and body condition score and any animals deviating greatly from the average of the group should be identified and individual feeding carried out.

Design:

Free-access stalls can be set out in I, T or L- shaped pen designs. The letter indicates the shape of the loafing area e.g the I design has one long loafing area with free-access stalls on either side, while T and L designs provide extra loafing space. The more functional the loafing area the more the sows will use it. This functionality can be achieved by adding wood shavings, rubber matting and drinkers to the loafing area.

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