Recommendations for managing animals in free farrowing systems

Farrowing house management can be challenging in any system. Not only are there general husbandry duties to perform such as feeding and mucking out, there are also situations where farmers may have to intervene to help piglets, treat sows and carry out other routine husbandry procedures. In order to achieve high levels of piglet survival good management is crucial. Interventions to promote piglet survival are needed more and more when litter sizes are higher than teat number.

When the sow is not confined in a crate the farmer must consider the best way to carry out these routine husbandry and piglet intervention tasks that achieve a safe and efficient working environment whilst respecting the maternal behaviour of the sow.

Some of these recommendations apply to any farrowing house; some are specific to free farrowing systems

Tasks to consider:

- Farrowing house preparation
- Moving sows in to farrowing accommodation
- Pre-farrowing sow management
- Nesting substrate management
- Mucking out
- Farrowing management
- Early post-farrowing management
  - Piglet processing
  - Piglet interventions – cross-fostering etc...
- Supplementary milk management
- Lactation management
- Creep feeding

Farrowing House Preparation

- Pens should be dry, having been washed and disinfected
- Flush slurry pits before sow entry (don’t wait until they move in it causes disturbance).
- Set ambient and creep temperature controls (recommended 18-20°C for room. Heat lamps and/or mats set on a curve starting at 32°C – visit our Creep Recommendations page in Farrowing Systems).
- **Fix anything that needs fixing before the sows come in.** It sounds obvious but it is worth checking that all fixtures and fittings are working and anything that would require entry to the farrowing pen to fix is also working (e.g. lights above pens, fans and misters in hot climates).
- Suggest preparing creeps with a layer of sawdust/shavings and pens with a handful of straw for entry day.
Moving sows into farrowing accommodation

- Move sows in five days before their due date (longer in outdoor systems – recommended 10 days). This is especially important for gilts in order to get them used to the environment and to being on their own in the pen.
- Have accommodation ready, pen doors open, water turned on and checked and move sows and gilts as groups of familiar animals to help keep movement flowing.
- Move animals calmly, avoid forcing animals in. If she doesn’t want to go into the first pen, let her go in the next one.

Click on the link to watch Danish farmers move sows calmly into free farrowing accommodation:

Farmers moving sows into free farrowing accommodation

The sows may be used to this routine but if the pen and its fixtures and fittings are novel we recommend you take the time to settle the animals in. Animals may be nervous of novel flooring. This might be the only place on the farm with slats.
Settling the sows and making sure they are confident moving around the pen is time well spent and could save you time later on.

- Sows confident in the pen will use feeder and drinker = good for intake ✓
- Sows confident moving around the pen should get up more =
  - Good for leg soundness ✓
  - Good for responding to a trapped piglet ✓

**Potential loading difficulties:**

- If you have pens that go all the way to the end of your building and you enter the sows through the nest or feeder entrance points, you may have problems with sows not realising there is an entrance point. The sow will only think there is a blind wall and may try to turn around.
- **Potential Solutions:**
  - Try another sow
  - Lead the sow into these end pens so that they know the way.
  - Multiple access points (pen dependent): Entrance through a dunging passage will likely reduce this potential loading difficulty.
- After loading check all entry and exit points are shut. Sows will test gates and doors if you don’t.

**Pre-Farrowing Sow Management**

- **Habituate your sows.**
  Between the time of first entry and farrowing, get the sows used to you going in the pens with them. Act calmly around the sows in order for them not to think of you as a potential danger factor when entering the pen. This will make it easy to work with the sows throughout piglet management and lactation.

  **Look at it from the sow’s point of view:** Once sows have farrowed many of the interactions you have with the sow will involve handling her piglets – something she is likely to think of as a negative experience. Putting some effort in to positive interactions pre-farrowing is worthwhile.

- **Do you hand-feed?**
- **Yes** = sows are likely to associate staff with a positive experience
- **No** = consider hand-feeding until post-farrowing or consider other options for positive interactions.

**TIP:** Some farmers will approach the pen with a handful of silage or straw. Sow begins to associate staff approaching with positive experience. Farmers say it reduces defensiveness when staff have to deal with piglets or inspect pen.
Nesting Substrate Management

In the EU it is required by law to provide sows with nest-building materials. Visit our Know the Rules pages for more information.

Although slurry systems may make this requirement technically challenging, new farrowing accommodation should be built with substrate (particularly straw) provision as standard practice.

Providing substrate (straw in particular) allows nest-building behaviour. Good nest-building behaviour improves maternal behaviour.

- Good maternal behaviour improves piglet survival which is good for the sow, piglets and staff.

**How much substrate should you provide pre-nesting?**

- Provide recreational substrate daily (e.g. a couple of generous handfuls) until 24h prior to the sows due date or until you observe the sow displaying nest-building behaviour (i.e. rooting, pawing ground, biting pen fixtures). This substrate provision can also be used as a way of increasing positive interactions with sows.

**How much substrate should you provide for nesting?**

- The minimum recommendations for straw provision for adequate nest-building behaviour is 2kg long-stemmed straw (i.e. approximately 2 leaves of a small straw bale).
- Straw is considered the best nest-building substrate; other substrates commonly used in commercial systems, such as shredded paper, have not to our knowledge been properly researched.
- We also recommend providing a layer of sawdust or shavings in the nest area.
- We recommend providing a deeper quantity of substrate and sawdust/shavings in complete solid nesting areas where drainage is difficult. This will help soak up placental fluids during farrowing and reduce the risks of piglets getting caught in the placenta.

**Are you accredited to a specific Assurance Scheme?**

Some Assurance Schemes may have particular requests for substrate provision. Visit our Assurance Schemes pages in Know the Rules for more information.

A note on outdoor straw management and straw management in non-climate controlled buildings (e.g. group system).

Outdoor straw management is important for successful farrowings and thermal protection. Recommended preparation of a standard farrowing hut (floor area = 3.69m²) is:

- Prior to entry provide 4 leaves of long-stemmed straw from large bales.
- Break the leaves up as much as possible, plug up any gaps around the edges of the hut and flatten straw down.
- Recommended depth of straw = 10-12cm.
Check nests daily. Avoid disturbance but if nest needs to be “made” (i.e. flattened) do so safely whilst sow is feeding.

Mucking Out Pens Pre-Farrowing

- Prior to farrowing, remove any soiled straw daily from the nest and replace by a similar amount of clean long straw.
- You can help train proper dunging behaviour by removing dung into a dunging passage rather than completely cleaning out.

Farrowing Management

- If a sow looks like she is about to farrow, when checked at any time, add extra straw and sawdust to the nest (enough to at least cover the nest area floor), especially around the back end of the sow to absorb birth fluids and help prevent splays in piglets. Try not to disturb the sow.
- If a sow looks like she might farrow overnight (nesting behaviours seen, milk present, fluids from vulva etc...) add additional straw/sawdust to nest before you leave.
- If sow is in nest and everything is progressing normally do as little to disturb her as possible. However, help piglets as needed, e.g. help piglets stuck in afterbirth, or piglets trapped, injured, looking cold, or in the wrong place, help them get to the udder, treat any injuries or splays seen, etc as per normal welfare routines
- Remove dead piglets, stillborns and afterbirth from the pen as soon as they are seen to keep good hygiene, but only if possible to remove without disturbing the sow. Cover afterbirth with straw if a problem with splay legs looks to be occurring and you are unable to remove.
- Do not remove the nest for the first few days post-farrowing unless it is completely soiled. Removing the nest during routine mucking out will disturb the sow. Add any new bedding material (e.g. sawdust/shavings) as needed to maintain hygiene. Add straw as per the EU directives.

Early Post-Farrowing Management

- Piglet processing:
- Offer the sow additional food or straw or silage to keep her occupied for processing.
- If the piglets are lying in the creep, close the creep front. If they haven’t found it collect them into the creep.
- If the pen has the capabilities to separate piglets from the sow (e.g. PigSAFE pen via the feeder) we recommend you do this before entering the pen to collect any more piglets for processing. If necessary keep the sow separated for processing (i.e. if she is agitated and aggressive towards you). Remember to let the sow out once you have finished. Alternatively if the sow is calm do not leave her separated whilst you are processing, just let her have access to the whole pen.
If the pen does not have these separating capabilities but you still need to gather piglets enter the pen calmly (use a pig board if you feel it is necessary – for example if the sow appears defensive) and usher the piglets into the creep.

- Exit the pen as soon as possible and process all piglets outside of the pen.

Click on the link to watch Danish farmers move piglets calmly into the creep for processing:

Gathering piglets in creep.

- Keep processing as calm as possible.

TIP: Some farmers complete all piglet processing below pen height. They say it reduces agitation of the sow and keeps the piglets calm.

Don’t process piglets directly in the sow’s space – e.g. is she standing by the entrance door? Move away. Also be aware neighbouring sows may get defensive.

- Replenish bedding if necessary but try not to disturb the nest too much.
- Once processed reunite sow and piglets and leave them undisturbed as much as possible.

How Do You Cross-Foster in Free Farrowing Systems?

- Recommendations are that any standardisation or equalisation of litters is done once the youngest piglets have had colostrum (not before 6h old) and within the first 24h-36h. We do not recommend repeated fosterings throughout lactation.
- Try and mix foster piglets with native piglets in the creep before letting them out to meet the sow.
Lactation Management

Straw and hygiene management:

- After two days allow the straw in the nest to reduce and then provide straw (which may be chopped) as per the EU directive. Soiled nest areas can be dried using disinfectant powder.