BPEX 2TS

Knowledge Transfer Bulletin

BREEDING

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Light levels in the farrowing house

We know that temperature requirements for piglets and sows are quite different in the farrowing house but what about the different light requirements of stockpeople and sows?

Defra state that pigs in buildings with no natural light should have at least 40 lux of supplementary light for at least eight hours per day. However 40 lux does not provide adequate lighting for stock people to be able to observe pigs in detail and manage a farrowing house to an excellent standard. So what level of lighting is needed to enable staff to work effectively and what does the sow need, and can it make a difference to the productivity of your unit?

What does the sow need?

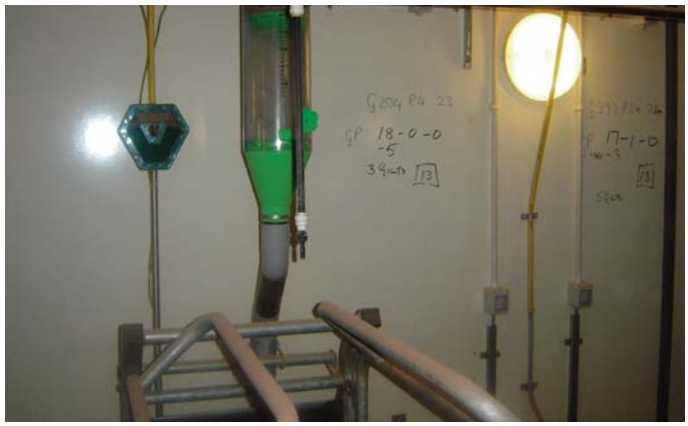
Studies carried out in this area showed that very bright levels of light, 400 – 500 lux, for 16 hours a day (with eight hours of dark) produced heavier weaners than those housed in less bright light as a result of increased suckling frequency and a higher milk yield. Increasing light levels in diary cows has similar effects on their milk yield.

In addition, work looking at dry and farrowing sows comparing a short day (eight hours light at 250 lux, 16 hours dark) and a long day (16 hours light at 250 lux, eight hours dark) showed that sows kept in the short day systems had higher levels of cortisol circulating in their bodies, which is an indicator of stress.

However the natural behaviour of a loose housed sow around farrowing is to seek dark areas to nest and give birth in. Therefore it may be necessary to consider increasing light levels and the length of light a couple of days after the whole room has farrowed. After this period the research shows that good levels of light for longer lengths of time improve weaning weights through better suckling and milk yields.

What does the stockperson need?

The level of light required by stockpeople varies depending on what tasks are being performed and the level of detail required, along with the individual site's hazards and risks. General recommendations are for a minimum light intensity of 200 lux and an average of 250 to 450 lux. The higher the level of detail required the higher the light intensity needed.



Assess your light intensity (lux) and timings today to improve productivity.

General tips for lighting

- Fit timers: they save energy and cut out a job to remember each day
- Clean lights regularly to maintain the correct levels of light
- Investigate the bulbs you use and see where you can save energy without scrimping on resource
- White wash walls to improve reflection of light

For more information and advice contact:

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