

Novel strategies to enhance creep attractiveness and reduce piglet mortality

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Aim: The aim of this project is to investigate several simple and inexpensive strategies for encouraging greater use of creep areas by piglets in multi-suckling pen systems. Successful strategies would thus reduce the incidence of piglet crushing as a primary outcome. The study will initially use simple preference-based testing and then use an applied approach to evaluate promising strategies in a “real-life” scenario.

Methods:

The project will make use of a welfare-science based, and an applied testing methodology to investigate strategies designed to enhance the attractiveness of a creep area to piglets in the first fortnight after farrowing. In an attempt to move towards more “welfare-friendly” post-farrowing housing systems for the sow which allow her to express more normal behaviours and engage in increased movement, there has been increased attention on alternative farrowing crate systems, by both the pig industry and scientific community. However, many of these systems, whilst going some way towards addressing sow welfare issues lead to increased piglet mortality due to crushing by the sow. This poses a major welfare, as well as economic issue for the industry. It has been widely recognised that a key solution to this problem is to attract piglets away from the sow into creep areas, especially in the first three days of life when crushing risk is at its greatest (Berg et al, 2006; Lynch 1983). It is our intention to investigate three novel strategies hypothesised to increase attractiveness of the creep area to piglets in the first fortnight after farrowing. These strategies are: use of bedding substrate material with applied scents, use of pig appeasing pheromone and the use of music/sound cues. Experimental measures will be behavioural in nature using focal and scan based sampling methodologies. Promising methods will then be investigated in an applied scenario.