

Group Farrowing in a Deep-Litter Eco-Shelter

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A Swedish group farrowing system designed to meet the behavioural and welfare needs of sows at parturition was trialed in a low-cost shelter with the aim of reducing the capital cost of providing the increased space per sow place required by the system. An Ecoshelter® was divided into two deep-litter pens (10.8m L x 9.1m W), each fitted with 10 de-mountable farrowing cubicles (2.4m L x 1.8m W x 1.2 m H). Groups of 10 sows bred within 7 d were moved into the pens two days prior to the first farrowing and allowed free access to the cubicles. The cubicles were removed after 10 to 14 days, permitting sows and piglets to mix freely. Sows had access to feed *ad libitum*, while a starter diet and milk substitute were provided for piglets in a communal creep area. One hundred and sixty three litters were farrowed, averaging 11.1 total born, 10.6 born alive and 7.6 piglets weaned per litter. Pre-weaning mortality was unacceptably high at 28.4%. The use of deep-litter in solid-sided cubicles resulted in temperatures above the thermal comfort zone of sows for much of summer, causing detrimental adaptive behaviours by the sows. The facilities also appeared insufficient to meet the behavioural need of the sow for isolation at parturition. Any welfare benefits achieved from housing sows in an enriched environment were negated by low piglet survival in the system.