

Demonstrating farrowing alternatives for small farms: Insulated tents for sows and pigs

Abstract: This project demonstrated that modifying a commercially available yurt kit for use as a farrowing facility is possible, but is likely to be cost-prohibitive for most farmers. Results from this project included a producer guide for crate-free farrowing.

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One insulated 24-ft diameter yurt kit was purchased in spring 2012. The yurt was erected at the Allee (ISU) Demonstration Farm, Newell, Iowa, and modified to house pigs. Groups of four bred gilts were purchased and were farrowed seasonally in the yurt. Throughout the project, energy use, labor, and pig performance were measured and recorded. Internal and external thermal conditions also were monitored.



CROSS-CUTTING

What was done and why?

Pigs fill an important niche in integrated crop and livestock farming operations and have long been a key component of financially sound family farming in Iowa. Pork niche markets provide an expanding sales outlet for farmers unwilling or able to raise pigs at the scale typical of present-day commodity agriculture. Most alternative markets for pork require that pigs be farrowed in bedded systems that forgo the use of farrowing crates. Farrowing in a less-controlled environment requires different animal husbandry skills and knowledge than using farrowing crates. Beginning and established farmers who are thinking of adding pigs to their farms are very interested in management information for crate-free farrowing.

Because current consumer expectations dictate that pigs be produced year-round, crate-free farrowing options for cold weather are required. Many niche pork companies will not accept new producers into their program unless they agree to farrow pigs during winter months. Several crate-free farrowing systems for cold weather have been demonstrated in Iowa, often with the financial support of the Leopold Center. However, those alternatives generally require a permanent, well-insulated structure and/or tremendous amounts of energy to provide a suitable environment for the newborn pig. This project examined the feasibility of using an insulated tent, or yurt, as a bedded, crate-free farrowing environment for swine production in Iowa.

What did we learn?

The yurt is a modular solution for farmers seeking an insulated space to farrow a small group of sows during cold weather. Although the cost of a commercially available yurt kit is prohibitive to widespread adoption, it is likely that a more economical version could be built from recycled, locally sourced materials. Pig management strategies and techniques developed during this project will inform the continued refinement of crate-free farrowing systems for cold weather.