

RESEARCHER LOOKS FOR SOLUTION TO AGGRESSION IN GROUP HOUSING

Scrappy sows

By Joanna Follings

Concern over gestation stalls has some researchers and producers looking to group housing as an alternative. But aggression between sows in a group can discourage producers from adopting the practice. That's led a researcher at the University of Guelph to look at ways of minimizing sow aggression in group environments.

Prof. Tina Widowski, an animal behaviour and welfare specialist and researcher in the Department of Animal and Poultry Science, has been focused on farm-animal welfare for the majority of her career. Since arriving at Guelph in 1990, Widowski has taken on dozens of projects to understand and improve the living conditions of farm animals – including alternatives to the controversial gestation stall, which restricts the movement of sows and prevents them from interacting with one another.

“Gestation stalls confine the sow, a very social and intelligent animal, into a small space for the majority of her adult life,” says Widowski.

Group housing, also called loose housing, has been suggested as an alternative to gestation stalls, to allow sows to participate in their natural social behaviours. But this option can have problems as well, because included among social behaviours is aggression – a potential safety issue for sows, and a real problem for producers. Sows can become aggressive with one another in an attempt to establish a dominant hierarchy.

So Widowski and her research team looked at ways to control sow aggression by adding a boar to the group to discourage competition. Although the number of scratches inflicted by sows on one another (an indication of aggression) decreased slightly when a boar was present, stress levels of the

sows increased. While research into alternative solutions to decreasing aggression in group environments is ongoing, Widowski also recommends a focus on animal husbandry to ensure group interaction goes smoothly.

“Understanding animal behaviour becomes key in a group environment,” says Widowski. “You have to know which sow is not fitting in, which one is not getting her meals.”

While change-over is slow, Widowski says those producers who have switched to a group housing system are pleased with the result. She has also completed a study to gauge the impact of reducing group housing space to 25 square feet per sow as opposed to the 35 square feet normally used in the University of Guelph system, so that it could be more easily adopted by industry. She found the reduced space had no impact on aggression, making it easier to implement on larger farms where space is a concern.

Widowski says working with producers to find practical solutions is key to improving the industry and allowing it to move forward. Having information available about her research and the other research that is out there is extremely helpful for producers as Widowski says “they shouldn't have to re-invent the wheel.”

Research collaborators include master's student Monica Seguin, Prof. Bob Friendship, Department of Population Medicine, University of Guelph and Roy Kirkwood and Adroaldo Zanella from Michigan State University.

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At Guelph they use a drop feeding system with either half pens of 15 sows or full pens of 30



They are unable to control the food intake of each sow and sows cannot all eat at once



There are many different feeding systems, the drop feeding system being the cheapest way to retrofit a barn