

## CANADIAN RESEARCHERS FOCUS ON IMPROVING ANIMAL TRANSPORT PRACTICES

# Road hogs

By Sarah Van Engelen

**Transport can be a stressful experience** for pigs. Numerous studies have been conducted with the hope of curbing transport stress, but most have been carried out in Europe and don't address many of Canada's unique transport challenges. Now, researchers are looking at the complexities of pig transport in Canada, to help provide country-specific recommendations.

Prof. Renée Bergeron, Department of Animal Behaviour and Welfare at the Campus d'Alfred, University of Guelph, is part of a research team lead by Prof. Harold Gonyou, University of Saskatchewan, studying the effects of transport on pigs in Canada by monitoring them before, during and after travel and paying specific attention to things like distance and climate.

"There have been a lot of research studies conducted on pig transportation, but not many in Canada," says Bergeron. "Here, we have extreme weather and long distances that we need to consider when examining animal transport stress."

In Canada, the sheer size of the country means pigs are often trucked long distances between farms or to processing plants. Canada's cold winters and sweltering summers can also be stressful on pigs during transport.

One of the research team's primary concerns is the effect of truck design on the stress level of pigs during transport and on their behaviour during unloading.

With cameras mounted in a truck, researchers are monitoring how long the pigs spend standing versus lying down during transport. Observers also record pig behaviour during unloading.

By coordinating the pigs' behaviour with outside factors, including temperature, duration of the trip and behaviour during all facets of transport, Bergeron and her team hope



*Drs. Bergeron, Widowski & Dewey are studying the effects of transport on pigs*

to develop a better understanding of how these all affect the animals. In addition to observation, Bergeron is also taking blood samples during the transport process to test for hormones, such as cortisol, that are indicative of rising stress levels. Heart rate and body temperature during transport, as well as meat quality, are also monitored.

"We want to achieve a good picture of the Canadian situation and which part of transport is the most stressful," says Bergeron.

Once the data is collected and analyzed, findings will be disseminated widely so all stakeholders – farmers, processing plants and regulation committees – can benefit. This study is supported by the pork industry, so Bergeron hopes improvements, such as transport changes and policy development, will be implemented quickly and easily.

"Hopefully we can apply this research and be able to help the industry," says Bergeron. "Our results can help inform regulators, such as the Canadian Food Inspection Agency and help in creating better Canadian standards."

*Also involved in this research are Prof. Harold Gonyou (project leader), University of Saskatchewan; Dr. Luigi Faucinato, Agriculture and Agri-Food Canada; Prof. Nora Lewis, University of Manitoba; Prof. Cate Dewey, University of Guelph; Prof. Tina Widowski, University of Guelph; Dr. Stephanie Torrey, Agriculture and Agri-Food Canada; and Prof. Jean-Paul Laforest, University of Laval.*

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