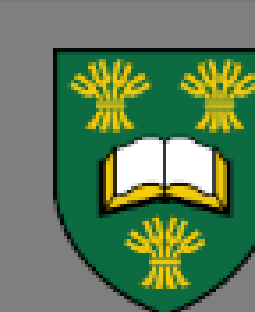


More than meets the eye: Using pig carcasses to assess animal welfare



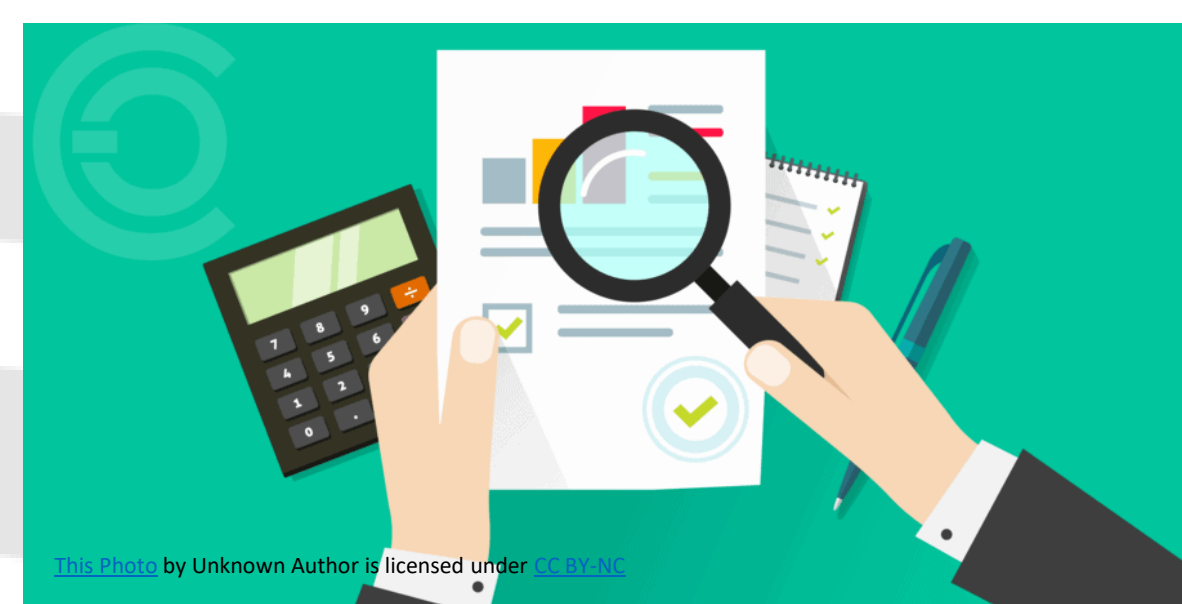
UNIVERSITY OF SASKATCHEWAN
Western College of
Veterinary Medicine
DEPARTMENT OF LARGE ANIMAL CLINICAL SCIENCES
USASK.CA/WCVM

1 On-farm assessment for pig welfare is:

Time-consuming

Costly

Pose a biosecurity risk



Commonly not performed by a third party

2

Animal-based indicators

- ✓ Characteristics measured on the animals
- ✓ Powerful approach to assess animal welfare of groups or individuals
- ✓ Provides animal wellbeing information regardless of the production system & resources available

Can assessing carcasses for animal-based indicators accurately inform about swine welfare on-farm & during pre-slaughter handling?

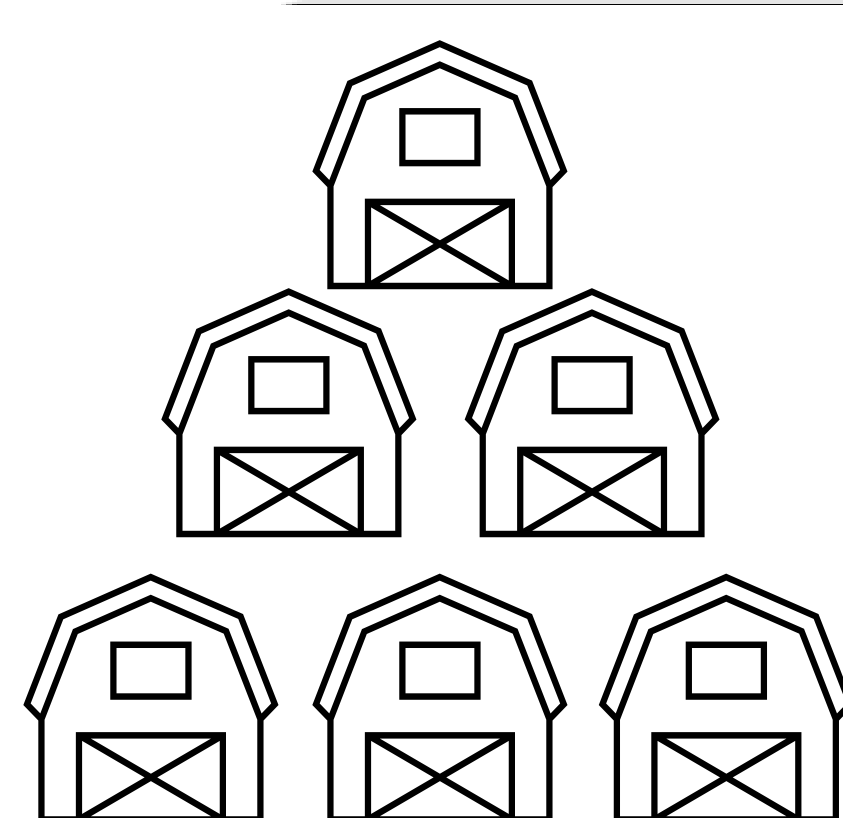


Over five months (winter & summer):

5 maternity

10 nursery

10 finisher



Assessed x3 times

On-farm Indicators

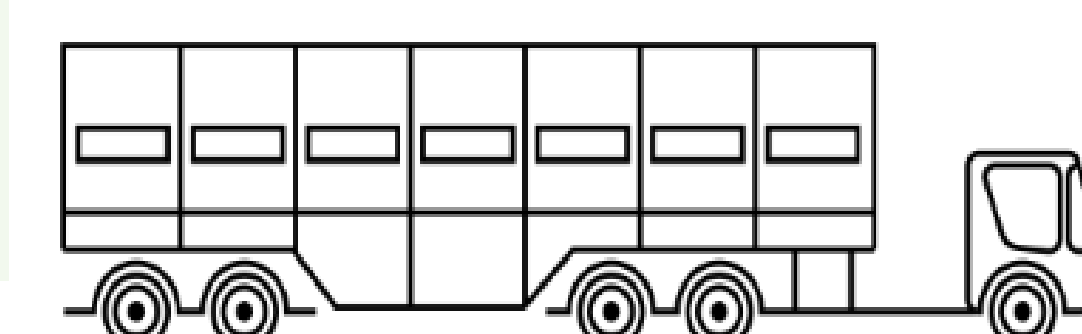
- 43 animal-based (i.e. tail biting)
- 5 environmental (i.e. ventilation)
- 6 resource-based (i.e. floor type)



~300 batches assessed

At least one **transport** load per finisher barn (31 market pig loads) was assessed for:

- Animal-based indicators (i.e. hernias)
- Human-animal interaction indicators (i.e., prod use)



The welfare assessment continued using abattoir video footage

Unloading

Lairage

Pre-slaughter

Carcass Indicators



10 animal-based (i.e. hernia)

2 human-handler (i.e. bruising)

1 environmental (i.e. frostbite)



Data processing is ongoing, preliminary results will become available in early 2023

4

- Determining the assessment of animal-based indicators of welfare on swine carcasses at slaughter can be a sensitive and specific tool to monitor pig welfare at different parts of the production chain.
- Incorporating camera-based assessment of animals at slaughter, paves the way for the development of automated animal welfare monitoring as a tool for the Canadian swine industry.

Thanks to our funders



Thanks to



for the facilities provided



Giuliana G Miguel-Pacheco¹, Yuanyue Wang¹, Yolande M Seddon¹

¹Western College of Veterinary Medicine, University of Saskatchewan, Saskatoon, SK S7N 5A2

For more information: Giuliana.miguel@usask.ca