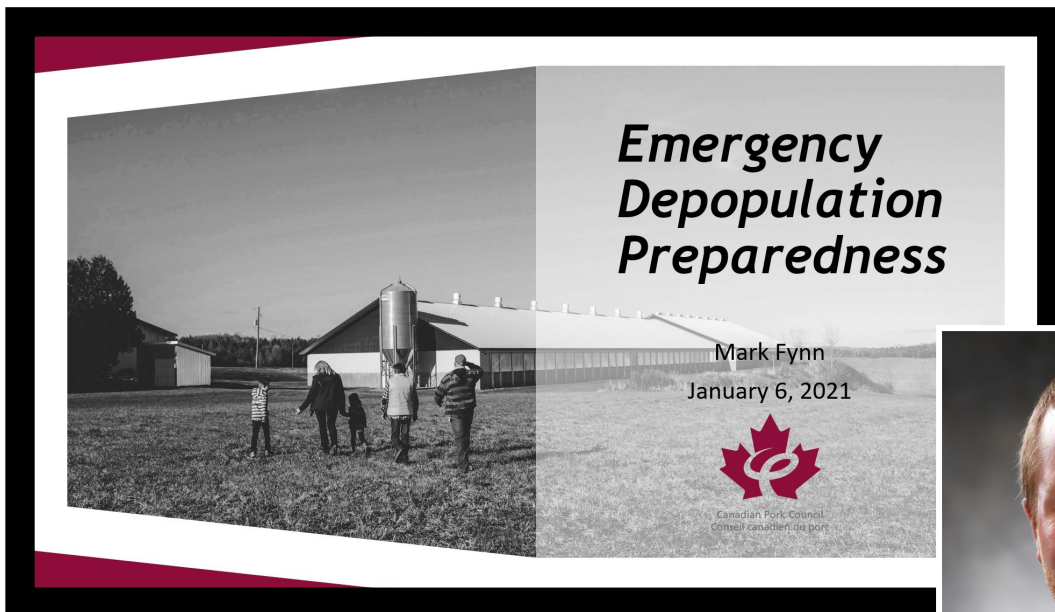




Emergency Depopulation: Hard Facts on a Hard Topic

By Geoff Geddes for Swine Innovation Porc | May 20, 2021



Mark Fynn from Manitoba Pork gave a talk during Swine Innovation Porc's webinar "African Swine Fever: How is Canada getting prepared" held in January 2021.

If politics and religion are some of the biggest no-no's for polite discussion, death is a close third. Yet no strategy for combatting African Swine Fever (ASF) would be complete without a thorough examination of destruction and disposal in the event of an outbreak. As the ASF webinar run by Swine Innovation Porc wrapped up at the 2021 Banff Pork Seminar, the hardest, and perhaps most important, subject was saved for last. Tackling the topic was Mark Fynn, who spoke about the "Work on Emergency Depopulation Preparedness".

As manager of quality assurance and animal care programs for Manitoba Pork, Fynn is no stranger to difficult discussions. He has been involved in a variety of subcommittee work in Manitoba, western Canada and with the Canadian Pork Council (CPC) regarding humane mass euthanasia as an emergency response.

"We are all aware of interruptions that have occurred at processing plants due to COVID-19, which really underlines the urgency of this topic," said moderator Stewart Cressman.



In presenting at the webinar, Fynn focused on what Canada is currently doing to prepare for the large scale depopulation of swine in the event of border closures caused by ASF or other diseases.

Technically speaking

“We have set up two separate groups to deal with destruction and disposal,” said Fynn. “On the destruction side, we have a technical expert subgroup whose major objective is to discuss all of the options that are out there for depopulation and euthanasia. This includes methods that currently exist and are used every day on farm for sick and injured pigs, as well as some of the higher capacity methods that we see emerging. “

The technical expert subgroup reviewed both established and emerging options and performed some assessments on them based on the capacity of each method in terms of people and equipment needed, as well as the impact on animal welfare. Based on those assessments, they developed suggestions and recommendations for the other destruction subgroup established for expert panel review.

“The expert panel took the assessments done by the other subgroup and ensured that they aligned with other industry standards. These included the OIE [World Organization for Animal Health], AVMA [American Veterinary Medical Association] and Code of Practice for the Care and Handling of Pigs.”

In combining the work of the two subgroups, experts have come to some agreement on acceptable depopulation methods, though the work is ongoing and further developments are expected down the road.

First on the list of proper methods is gaseous euthanasia. Though this approach usually involves carbon dioxide, nitrogen is currently being studied as an alternative gas.

Physical methods, such as penetrating and non-penetrating captive bolt guns, are another common means of euthanasia and the subgroups are anxious to see what sort of capacity these methods could accommodate.

“A third option encompasses electrical methods. There is emerging information on this method regarding how we might euthanize animals using electricity in a high capacity fashion.”

Abattoirs are also being discussed for the role they could play in depopulation. Other methods like lethal injection are good for animal welfare, yet hard to perform at a high capacity as needed for depopulation during an outbreak.

Tools of the trade

As Fynn points out, there is no one perfect method or one size fits all approach. In preparing for

ASF, planners need as many tools as possible in their toolbox. Different scenarios call for different methods, and the situation will vary across the country, so it's important to consider all options.

“In reviewing the various methods, we are trying to determine the acceptability of each one when it comes to animal welfare and public perception. Some may be feasible in trial settings and based on anecdotal proof, but require further trials to be verified as valid. There are also techniques that potentially would not be recommended, and others that are completely unacceptable. We take these categories into account when we go through the assessments of usability.”


In addition to all the work happening on a national level around destruction and disposal, much is being done by individual provinces across the country. Because they are so highly integrated, provinces in the west are doing some collective planning as a region, as is the Maritimes, and Quebec is also highly focused on the issue.

Under the heading of “every cloud has a silver lining”, due to the fallout over COVID-19 in the province, Ontario is actually ahead of the game in developing plans for dealing with surplus pigs.

Like the fight against COVID-19, bracing the country for ASF is a marathon, not a sprint.

“A lot of groups are working diligently on this, and hard discussions are taking place. I don't think we are close to the finish line at the moment from a planning perspective, but we are certainly making progress.”

Helping to spur on the work in this area is the reality of what awaits us if we fail, as noted by Cressman at the talk's conclusion.

“Given that close to 70% of the pigs bred in Canada must find a home outside the country, it's not hard to imagine what faces us in an ASF outbreak, and it's not a pretty picture.” 

Video available!

[Click here to watch a recording of our webinar “African swine fever: How is Canada getting prepared?”](#) that was held on January 6, 2021.

Acknowledgements

Publication of this article has been made possible by Swine Innovation Porc within the Swine Cluster 3: Innovating for a Stronger Pork Sector research program. Funding is provided by the Government of Canada under the Canadian Agricultural Partnership, provincial pork producer organizations and industry partners.