



660 Speedvale Avenue West,
Suite 302
Guelph, ON N1K 1E5
T: 519-837-1326
E: info@farmfoodcare.org
W: www.FarmFoodCareON.org
@FarmFoodCareON

Dealing with the summer heat: Animal comfort and productivity

Warm weather is finally here, and it's time to prepare livestock barns for summer ventilation rates

By: Bruce Kelly, Program Consultant, Farm & Food Care Ontario

Every spring, livestock producers add seasonal planting and other outdoor activities to their already busy schedules, but with higher temperatures and humidity comes a reminder to inspect all barn ventilation systems. Ensure all fans are uncovered, operational, and all air inlets will open to allow maximum airflow capacity.

Now is a great time to inspect fan control systems in barns, remove winter fan shutters, unlock or open air inlets, and test cooling systems. A leaf blower and dust mask are excellent tools to clean off months of accumulated particle debris before test running equipment. After inspection and cleaning, a simple way to test ventilation systems is to grab the thermostat probe with your warm hand – this should set the barn's ventilation controller through its ventilation stages toward maximum fan capacity or open curtains/sidewalls in naturally ventilated systems. It is essential to set variable-speed fans to their full speed. If multiple fans are connected to the thermostat, larger single-speed fans should engage as the perceived temperature in the room or barn increases, and air inlets should open accordingly. If fan motors, blades or shutters need maintenance or replacement, service should be scheduled as soon as possible.

Naturally ventilated barns have manual or automatic control systems that run chimney fans and control sidewall panels or curtains. These systems need to be inspected, cleaned, or lubricated as they may not have opened fully for several months. Manually operated systems need to be checked and moved to summer settings. Bird exclusion screens should be repaired or replaced. Store the winter fan shutters or closure panels in a safe place away from livestock and note the condition of curtain panels and other equipment, as they may need repair before they are again called into service next fall. Be sure to inspect cooling systems in poultry and hog barns. Cooling pads are a great way to lower peak summer temperatures in poultry barns, and spray or drip coolers work well in hog barns—complete cleaning and maintenance before use.

Summer thunderstorms bring the risk of a power outage when the need for ventilation, power and water is critical. Properly functioning alarm systems and generators are essential preventative measures. High barn temperatures from equipment or storm power failures can put your animals at risk. Ensure that electronic thermostats are linked to an alarm system and set the alarm to a realistic temperature. Check alarm system notifications to ensure email or text alerts reach the correct recipients.

Warm temperatures and humidity must be considered when making decisions about livestock transportation. Recommended loading density charts are available from various commodity groups and Farm & Food Care, which consider the size of the compartment and weather conditions. When doing calculations, consider the daily anticipated high temperature for both the farm and the destination. For example, the livestock weather safety index for market hogs reduces loading density by either 10 or 25 per cent as the combination of temperature and humidity increases above a baseline of 23 degrees Celsius as the expected daily high. Transportation density charts are available for many species, including dairy, veal cattle, beef cattle, weaning and market pigs, sheep, goats, and horses. Loading trucks in the cool, early morning hours will help minimize the risk of heat stress and trucks should be as open as the day's temperature dictates. Temperature can rise dramatically in a truck that is not moving. Contingency plans should be in place in the event of unexpected road work or traffic delays during road and bridge construction season. Animal welfare during summer transport has received a lot of public attention in recent years, and it is more important than ever to be diligent.

Livestock production is a year-round business, but the summer's heat, like winter's cold, requires adjustments to equipment and procedures. Special considerations must be made to ensure animal comfort and productivity. Take time to check your equipment and review procedures with family and staff to ensure your livestock barns and transportation systems are ready for summer.

Have a safe and enjoyable summer!

Farm & Food Care Ontario

Resources Related to warm weather transport:

[Ontario Pork: Livestock Weather Safety Index](#)

[CFIA: Transporting animals during hot and humid weather](#)