

gSystems [5]



2023 was a busy and productive year for us. We made several Arthur site updates and improvements, celebrated some staff milestones and welcomed new individuals to our team. All of this continues to make us stronger and better able to support our customer base and help you grow.

JANUARY 2024

With the start of a new year, we can reflect on the past twelve months and on the journey we have had with each of our valued customers. Thank you for trusting us and allowing us to contribute to your success.

From everyone at the Canarm AgSystems team, we wish you all a prosperous year ahead!

Managing Winter Temperatures in Naturally Ventilated Dairy Barns



By Rick McBay

Natural Ventilation Specialist

Reduce the buildup of humidity that occurs in dairy barns in the winter by maintaining an appropriate interior temperature, managing ridge ventilation and increasing the air exchange.

One of the most common issues that occur during the cold-weather months in a naturally

ventilated dairy facility is a buildup of humidity that can lead to the creation of condensation on the inside surfaces of your building.

Mature dairy cows generate a great deal of heat, which unfortunately contains a large concentration of moisture from respiration. This becomes troublesome when the condensation collects on the inside surface of your sidewall curtains, freezes into a sheet of ice and prevents your curtain system from operating properly. The added weight of the ice on your curtain fabric can also lead to operating hardware failures, such as cable breakage.

Additionally, when humidity levels rise, so does ammonia, which can degrade air quality.

To manage this aspect of the environment, you need to use the part of your natural ventilation system that is designed for cold weather – the ridge ventilation component. This part of your system is designed to remove the warm moist air from the interior during the time of year when your sidewall openings must be restricted due to outside temperatures.

There are three types of ridge ventilation commonly in use: open ridge, overshot ridge and ridge-mounted chimneys. When in the design



stage, it is important to make sure that your ridge ventilation is sized properly for the dimensions and capacity of your facility.

If your ridge system has adjustable features (e.g., movable chimney dampers or adjustable curtains on the overshot), only use them to reduce openings when the temperature gets too low and could cause equipment failure or water to freeze in the barn. During the rest of the winter season, leave the ridge openings at full capacity.

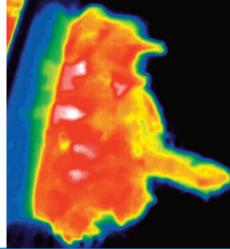
The key to operating your natural ventilation system in cold-weather conditions is to maintain a proper interior temperature. We often make the barn too hot, setting the temperature based on our comfort level instead of considering how the cows feel. We have observed that mature cattle do not start increasing their feed intake to replace lost body heat until the temperature is well below freezing. When using natural ventilation to reduce humidity and ammonia, air exchange must be increased in the building. This can be achieved by lowering the temperature, which will allow sidewall curtains to open partially and the ridge system to exhaust at full capacity.

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Featured Products





INTEGRA HEAT PLATES

Canarm's Integra heat plates are designed to enhance the comfort and well-being of your new born piglets.

Pumping warm water through the heat pads and using the natural heat dissipation ability of aluminum distributes the heat quickly and evenly warming up the pad, gives the little ones a warm place to lay, rest and grow.

The thermal image on the right shows the heat distribution produced by the heat plate. The white, red and orange areas represent warmest temperatures and show the little ones basking in warmth after a good feed.



Congratulations to the Zehr family on the completion of their new dairy facility featuring CanarmAgSystems stabling and ventilation products. Great job Avonbank!

Recent Installs



J and B Millen Farm in Great Village, Nova Scotia recently completed their new sow barn equipped with 84 Canarm turn around crates. Barn also features some trusted Canarm feeders taken from their old barn. Another great job by LBJ!

You could be eligible for a rebate on select Canarm energy efficient products!



Save on Energy Retrofit Program (effective January 8, 2024) provides participant incentives to upgrade their facilities with measures to reduce electricity consumption. As part of these updates, new measures and incentives are being added to the Retrofit program to enable businesses to continue to save on energy costs and to take advantage of a variety of technologies and products to help improve the overall operations of buildings and facilities. These rebates are available on the purchase of select Canarm products, including:

High Temperature Cutout Thermostats, Creep Heat Controller, High Efficiency Ventilation Exhaust Fans, Recirculation Ventilation Fans and Low Energy Livestock Waterers.

Eligible projects must be completed no later than December 31, 2025. For more information visit **www.saveonenergy.ca** or call 1-844-303-5542.

SIMAQ (Quebec) - February 1-3 National Poultry Show - February 7-8 South Western Ontario Pork Conference - February 21 Woodstock Dairy Symposium - February 22

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Upcoming Shows

Western Canadian Dairy Seminar - March 5-8 Ottawa Valley Farm Show - March 12-14 Central Plains Dairy Expo - March 19-21





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