



651 Notre-Dame St.,
Embrun, Ontario, K0A 1W1
Ph: (613) 443-5489 Fax: (613) 443-6364
office@embrunfarmvet.com
www.embrunfarmvet.com

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**Dr. Marc Levesque, Dr. Steve Dorais, Dr. Lucie Décoeur
Annie Delattre, RVT**

Heat Stress: Every Little Thing Will Help!

Current weather predictions for this summer are extreme heat and humidity. Last newsletter addressed the ventilation aspect. I want to emphasize the importance of understanding the difference between ventilation and 'cooling'. Ventilation is simply providing fresh air to animals. Cooling is the removal of excess corporal heat from animals. The methods are: using air speed on the surface area of cows, using water to produce evaporative cooling whereas the water turns from its liquid form to vapour thus energy(heat) is drawn from the animal's body. Water only helps when used in conjunction with fans to remove the water vapour from the air surrounding the animals. This also works best when relative humidity is below 75%. We do have measuring tools to evaluate the air speed, temperature and heat stress index inside barns. I would like to now list off a few areas of heat stress management areas to help our different management groups reduce the immediate, medium and long-term effects associated with heat stress.

Calves: Because calves have a smaller body weight to surface ratio, they seem to cope with the heat much more easily. They must have shade and unlimited access to clean water. Heat stressed calves will have trouble breathing and often have watery diarrhea. The one thing to remember is that the colostrum collected from heat stressed fresh cows is often very poor, as those of you who measure quality will notice. You may want to supplement colostrum with the replacement powders.

Calving cows: Pre-fresh cows must be removed from pasture and sun exposure. Calving is a very stressful event that overheats cows. These animals may stay overheated for a lengthy period following their calving effort. We must be very aggressive in cooling them immediately after calving, by providing cold water, wetting them and apply extra fan power directly on them. In hot weather, any cow with fever in addition to the heat stress will cause her to de-compensate. A normal retained placenta or metritis can quickly deteriorate into a hyperthermic shock and a down and dying cow.

Milking herd: We want to keep these cows milking as well as possible. As expected, older cows seem to have more trouble coping and so might need extra attention. Here are a few reminders.

- * Any cow that is breathing **through her mouth** means that she AND the rest of the cows must immediately be hosed down to decrease their body temperature. This is a potentially lethal situation.
- * Be sure that all fans are in working order and that air flow is moving well amongst your animals. Fans need to be blowing where the animals are resting. Add supplemental fans if necessary.
- * Keep food fresh – cows may not be eating as much in the heat, but with the increased heat and humidity, the old feed must be removed and replaced. Increased feeding at night and decreasing in daytime may help reduce waste.
- * Ensure that all water bowls are cleaned and have sufficient flow. Make sure any special needs areas also have good access to water.
- * Do not vaccinate, apply pour-ons, or do extra handling such as hoof trimming during high heat stress periods.

The last couple of summers have not been particularly hot but it would not be surprising if summers such as the present one become the new norm. Let this summer be a lesson learnt and initiate a comprehensive plan to be ready for next summer! We will gladly offer solutions to help!

Embryo Transfer Services

613-795-9947

Dr. Luc Besner
Neil Moorhouse, ATT

Nation Veterinary Hospital

613-764-1234

Embrun Veterinary Hospital

613-443-5459