

# AVA Newsletter

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## Has Spring Finally Sprung?

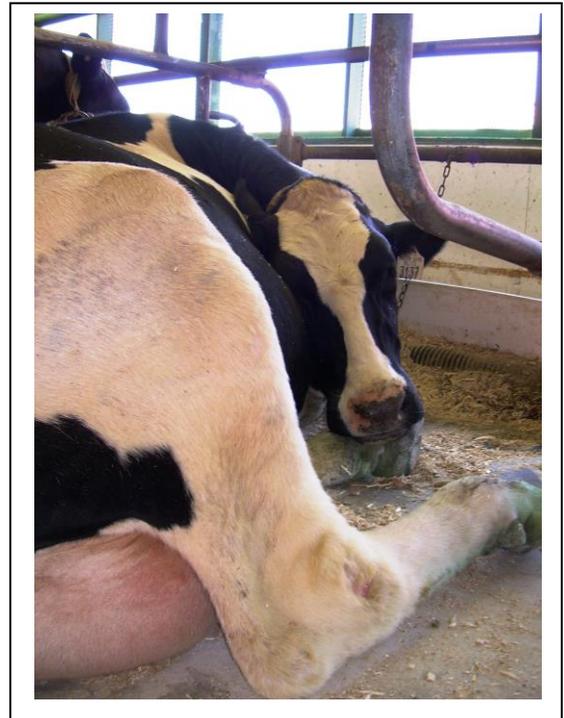
It has been another tough winter for all of us here in western New York – from one of the snowiest Novembers to the coldest February on record I'd say we have all had enough! Now, with an extra hour of light and true warmth emanating from the sun all we have between now and summer is MUD! All of us at AVA wish you a very happy spring!

## Welcome, Dr. Andrew Dann!

Please join us in welcoming Dr. Andrew Dann to the clinic! Dr. Andrew is a 2014 graduate from Saint George University originally from Marathon, NY. He completed his clinical training at the University of Minnesota and joined the Attica Vet team in February. Make sure to introduce yourself when you see him at your farm as he is very eager to get to know all of our clients!

## Do Cows Sleep?

You have surely seen cows sleeping, right? Flat out or curled in a ball maybe with their eyes rolled back or even twitching like they are dreaming! But most research states that cows don't really sleep all that much. A cow's sleep pattern is called polyphasic meaning they sleep in small intervals. Estimates are that cows sleep for about 4 hours a day and drowse or doze for about 8 hours per day. Only about 45 minutes of total sleep hours consists of REM sleep (rapid eye movement). During REM the cow's head is typically resting straight out on the ground or curled back onto her body. Because of this body positioning it is important to ensure that your cows have enough stall space to stretch out or curl around to allow for complete REM sleep. If you have a tie-stall barn make sure the neck chains are long enough for the same reason.\*



\**Miner Institute Farm Report February 2015*



It is time to start thinking about COOLING!

We know winter just ended (sort of). But it is time to seriously start thinking about how you will be cooling your cows this summer. For those of you without a system in place it is time to start planning one and for those of you who already have a system, it is time to start making any improvements or maintaining the integrity of the cooling equipment at your farm.

Heat takes a toll on your cows in many ways: lower production, rumen acidosis, milk fat depression, poor reproduction, weakened immune system, mastitis, transition cow diseases (RP, DA etc), and lowered body condition scores. Heat stress is a product of both temperature and humidity. The temperature humidity index (THI) threshold for reproduction is 65 which is lower than the THI of 68 for milk production.

The four main methodologies for cooling cows are: **shade, air, water, and time**. The holding pen and the maternity pen are the areas of highest priority on the farm for heat abatement followed by the pre-fresh pen, lactating cow groups, hospital pen, processing areas and travel lanes. The holding pen is of highest priority because of the hostile environment that is created when many cows bunch together in a space with little to no air flow, and high moisture.

#### Heat abatement in the holding pen:

**Fans:** Place one 36" fan for approximately every 10 cows. Move air toward back of pen, take advantage of prevailing wind if possible. Target wind speed should be 4-6 mph.

**Water:** Sprinkler nozzles deliver 1-8 gallons per minute, 1 gallon per 150 sq. feet. Set sprinklers to begin at 68°F, 1-2 minutes ON with a total of 15 minute cycle. Reduce cycle interval as ambient temperature increases. Water needs to wet the backs of the cows and then stop for a period to allow for evaporation before another cycle begins.

**Shade:** For best results use solid shade or more than 90 percent blocking shade cloth.

#### Maintain the system you currently have!

- Clean your fans: A dirty fan can reduce efficiency by 40%
- Adjust fan angles and orientation, tighten belts, oil if required
- Check integrity of water lines – this winter was very, very cold!

If you would like to hear more about how heat abatement could work on your farm, ask your veterinarian!