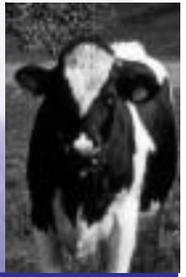




White Oak Mills

# Dairy News Leaf

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## Rice Joins White Oak as Calf Specialist

White Oak is pleased to announce that **Christa Rice**, of York, joined White Oak's dairy team late March as a full-time Calf Specialist / Dairy Nutritionist.

Christa's responsibilities include providing calf services to White Oak dairy customers, including on-farm monitoring, measuring and tracking of calf and heifer growth. In addition, she is responsible for formulating various White Oak dairy feeds and providing additional dairy services. She is a dairy certified Professional Animal Scientist.

Christa earned her Bachelor of Science degree in Animal

and Food Science from the University of Delaware and a Master of Science degree in Animal Science from the University of Tennessee. Her work experience includes completing dairy research at the Miner Institute, NY, working as a Univ. of Delaware milking assistant, serving as barn manager of Cedar Valley Stables, TN, serving as a Graduate Teaching Assistant and Graduate Research Assistant at the University of Tennessee, and more recently providing dairy nutrition / sales support for a Lancaster County, PA company.



*Christa Rice*

If you have a calf question or feel Christa could be of benefit to you on your farm, please talk with your White Oak Dairy Specialist. 🌿

## Strategies to Aid Profitability During Uncertain Times

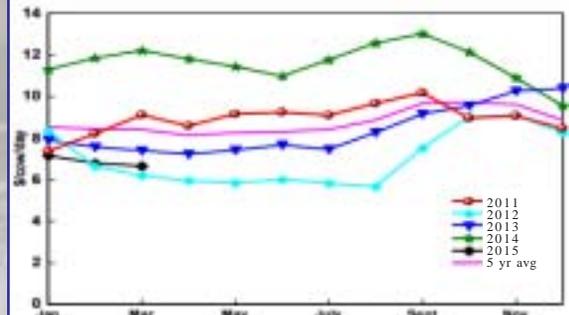
During White Oak's Cumberland County Farm Meeting in April at Ray & Jean Thrush's Farm, Shippensburg, PA, Dr. Clay Zimmerman, of Balchem Corp., gave an informative and timely presentation titled "Strategies to Aid Profitability during Uncertain Times." Dr. Zimmerman highlighted falling milk prices and the importance of using caution when attempting to cut costs in response ... especially feed costs. He encouraged farmers not to lose sight of the ultimate goal of maximizing income over feed cost.

Dr. Zimmerman emphasized raising quality forages and monitoring forage inventories. He also cited optimizing production of milk components, as these are the basis of improving milk income. Working closely with your nutritionist to select feed additives is a great way to increase milk components and income over feed cost. The greatest return from additives is from transition animals and early lactation cattle, so be sure not to shortchange your high producers, and of course, use additives that are well-researched to consistently improve profitability.

Beyond feeding management, improving heat detection and breeding help with profitability as calving

intervals longer than 13 months cost around \$3/cow/day. Similarly, heifers calving beyond 24 months of age cost the farm around \$3/heifer/day. The most important message Dr. Zimmerman encouraged attendees to take away from his presentation was that "it is very difficult to save your way to a profit in the dairy business." There are many factors that can be influenced on the farm to increase profitability including management of forages, increasing milk components by using well-researched feed additives, and improving breeding. 🌿

### PA Dairy Income Over Feed Cost



Graph courtesy of April 2015 PSU Dairy Outlook - Dr. Jim Dunn

# Helping Calves Keep Their Cool When the Heat is On

By Christa Rice, PAS  
White Oak Calf Specialist

As summer temperatures climb, many thoughts are on reducing heat stress in lactating cattle. Heat and humidity have costly effects on lactating cows' performance in the forms of decreased feed intake and milk production as well as reduced reproductive performance. Meanwhile, dairy owners often do not consider how heat stress may impact young stock.

Dairy calves can experience heat stress at temperatures around 85° F. Calves and heifers can withstand higher temperatures than lactating animals because they can dissipate heat more effectively and they do not experience the metabolic demand of lactation, which increases metabolic heat in milking cows.

Effects of heat stress on calf performance can be costly as heat-stressed calves will show decreased grain intake and behavioral changes (i.e. panting and increased standing). Decreased grain intake slows rumen development and can cause a more marked "slump" in growth following weaning. Behavioral changes in response to excessive heat, such as panting and decreased time laying down, increase calves' maintenance energy needs, which means more energy is being diverted away from growth. Prolonged heat stress can even decrease calves' immune function.

Thankfully, there are simple management changes that can be

implemented on-farm to reduce the effects of heat stress and keep calves performing their best.

**Determine which groups are affected by heat stress.** Check respiratory rate. When temperatures climb, take a few minutes to observe breaths per minute on several animals. Respiratory rate can be checked by watching the rise and fall of the animals' sides. Determine breaths per minute by counting the number of breaths per 15 seconds and multiplying by four. If an animal's respiratory rate is greater than 90 breaths per minute, they are experiencing heat stress.

**Simple management changes can ... reduce the effects of heat stress and keep calves performing their best.**

**For heat-stressed calves, first observe your calves' housing.**

If calves are in plastic hutches, they should face north away from the sun (note: this is the opposite during

winter when hutches should be placed with Southern exposure). All vents on plastic hutches should be left open on warm days. To further increase airflow in plastic hutches the back of the hutch can be elevated using blocks.

For nursery barn housing, open sidewall curtains and ridge vents fully. Fans are beneficial in these barns if natural airflow is difficult to achieve. For animals on pasture, provide from trees or shelters.

**Also, consider your summer bedding material.** Changing calf bedding from straw to a less insulating inorganic material such as shavings or sawdust keeps calves cooler and also

significantly reduces fly development in calf areas.

Inorganic bedding can really make a difference in reducing the additive effects of stress from heat and biting flies.



**Adjustments to calf feeding management can also help reduce the effects of heat stress.** Fresh water must be available at all times as calves can drink three to six gallons per day during warm weather. Change water during morning and evening feedings, and if calves are finishing water before the evening feeding, it may be necessary to refill midday.

One way to keep water fresh is to separate water buckets from the calf starter using a divider between buckets. Another consideration for feeding calves in the summer is to check and replace calf starter frequently since starter can become moldy very quickly in warm, humid weather.

The effects of heat stress on calves can also be minimized by managing timing of potentially stressful procedures such as dehorning, vaccination, and group changes. Calves should be worked or moved during the coolest parts of the day (morning or evening). During periods of extreme heat, spreading out stressful procedures over multiple days may help reduce animal stress.

Heat stress doesn't have to slow your calves down this summer if you make simple management adjustments. 🌱