

KEEP YOUR COWS COOL THIS SUMMER

Per usual, heat stress tends to begin to rear its ugly head around this time of year. Fortunately, our knowledge of the impact of heat stress on herd performance, as well as the efficacy of heat abatement strategies continues to evolve.

Let's review some important heat stress-related numbers:

- **> 68 degrees Fahrenheit:** Temperature Humidity Index (THI) where mild heat stress begins in dairy cows
- **80 degrees Fahrenheit:** The THI where moderate to severe heat stress begins
- **10-25%:** Decrease in milk production during heat stress
- **2:** Hours/day increase that a cow will spend standing during heat stress (THI > 70 degrees Fahrenheit)
- **4:** Pounds of milk/day that will be lost due to increased standing time
- **1,000-2,000 lbs.:** Reduced milk yield in the lactation after dry cows' experience heat stress

Heat abatement through management: Proper evaporative cooling systems are by far the most effective means for controlling moderate to severe heat stress in dairy cattle located in low humidity climates. Sprinklers over the feedbunk with fans are the best method to cool cows. Sprinklers allow the water to soak through the hair and onto the skin, which, combined with fans, allows cows to dissipate more heat. At higher temperatures, fans alone are not adequate enough to allow the cow to cool down.

Other management options to reduce the impact of heat stress on cattle:

- Emphasizing clean and abundant water and stalls in the summer months
- Feeding during cooler periods of the day to minimize heating of TMR
- Making sure dry cows and replacements have access to shade

Dietary adjustments to reduce the impact of heat stress on cattle:

- Feed more digestible forages to high production cows to reduce heat production during digestion
- Increase dietary bypass fat, K, Mg, niacin, and fat-soluble vitamins (A, D, E)
- Consider additives such as **ThermoCAD**, which include potassium, yeast, direct fed microbials, Tasco®, and other ingredients designed to aid in decreasing heat stress
- Supplement Rumensin® to increase glucose availability and stabilize rumen pH

| Dairy Cow Temperature Humidity Index (THI) | | | | | | | | | | | | | | | | | | | |
|--|------------|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
| Temp° F | Humidity % | | | | | | | | | | | | | | | | | | |
| | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 | 90 |
| 72 | 64 | 65 | 65 | 65 | 66 | 66 | 67 | 67 | 67 | 68 | 68 | 69 | 69 | 69 | 70 | 70 | 70 | 71 | 71 |
| 74 | 65 | 66 | 66 | 67 | 67 | 67 | 68 | 68 | 69 | 69 | 70 | 70 | 70 | 71 | 71 | 72 | 72 | 73 | 73 |
| 76 | 66 | 67 | 67 | 68 | 68 | 69 | 69 | 70 | 70 | 71 | 71 | 72 | 72 | 73 | 73 | 74 | 74 | 75 | 75 |
| 78 | 67 | 68 | 68 | 69 | 69 | 70 | 70 | 71 | 71 | 72 | 72 | 76 | 73 | 74 | 74 | 75 | 75 | 76 | 76 |
| 80 | 68 | 69 | 69 | 70 | 70 | 71 | 72 | 72 | 73 | 74 | 75 | 75 | 76 | 76 | 77 | 78 | 78 | 79 | 79 |
| 82 | 69 | 69 | 70 | 70 | 71 | 72 | 73 | 73 | 74 | 75 | 75 | 76 | 77 | 77 | 78 | 79 | 79 | 80 | 80 |
| 84 | 70 | 70 | 71 | 72 | 73 | 73 | 74 | 75 | 75 | 76 | 77 | 78 | 78 | 79 | 80 | 80 | 81 | 81 | 83 |
| 86 | 71 | 71 | 72 | 73 | 74 | 74 | 75 | 76 | 77 | 78 | 78 | 79 | 80 | 81 | 81 | 82 | 83 | 84 | 84 |
| 88 | 72 | 72 | 73 | 74 | 75 | 76 | 76 | 77 | 78 | 79 | 80 | 81 | 81 | 82 | 83 | 84 | 85 | 86 | 86 |
| 90 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 86 | 87 | 88 |
| 92 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 85 | 86 | 87 | 88 | 89 | 90 |
| 94 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 86 | 86 | 87 | 88 | 89 | 90 | 91 | 92 |
| 96 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 |
| 98 | 76 | 77 | 78 | 80 | 80 | 82 | 83 | 83 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 |
| 100 | 77 | 78 | 79 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 98 |
| 102 | 78 | 79 | 80 | 82 | 83 | 84 | 85 | 86 | 87 | 89 | 90 | 91 | 92 | 94 | 95 | 96 | 97 | 98 | 100 |
| 104 | 79 | 80 | 81 | 83 | 84 | 85 | 86 | 88 | 89 | 90 | 91 | 93 | 94 | 95 | 96 | 98 | 99 | 100 | 101 |
| 106 | 80 | 81 | 82 | 84 | 85 | 87 | 88 | 89 | 90 | 91 | 93 | 94 | 95 | 97 | 98 | 99 | 101 | 102 | 103 |
| 108 | 81 | 82 | 83 | 85 | 86 | 88 | 89 | 90 | 92 | 93 | 94 | 96 | 97 | 98 | 100 | 101 | 103 | 104 | 105 |
| 110 | 81 | 83 | 84 | 86 | 87 | 89 | 90 | 91 | 93 | 95 | 96 | 97 | 99 | 100 | 101 | 103 | 104 | 106 | 107 |

WHAT IS YOUR BLUEPRINT® FOR FLY CONTROL?

As we move further into summer, we must think about our fly control programs, especially for pasture cattle. A good fly control program is essential to helping your cows maintain performance throughout the summer. We offer several great options in our Blueprint mineral line for feed through fly control with Altosid®, and this year we are expanding our Blueprint line to include ClariFly®. ClariFly is a larvicide that helps to stop the life cycle of the fly and helps to control the following types:



House Fly: 6-7 mm long and grayish in color. Females lay eggs in batches of up to 150 at a time in manure, wet organic matter, spilled feed and compost piles. They tend to transfer disease as they fly from food source to food source within barns.



Stable Fly: Just a bit smaller than the house fly, the Stable fly is distinctly different because of the piercing mouth part that penetrates skin to obtain blood and inflicting painful bites on cattle legs. The life cycle of the Stable Fly is 3-4 weeks and they also lay their eggs in manure, and any other wet organic matter that is around the premises. 5 or more Stable flies per front leg of cattle starts to negatively impact cattle performance and your bottom line.



Horn Fly: Small biting flies about half the size of the House and Stable fly. They have piercing mouth parts similar to the Stable Fly and will take up to 40 blood meals per day on cattle. They typically congregate on the backs of their hosts and only leave to lay eggs in fresh cow pies.



Face Fly: Similar in size to the House Fly, the Face Fly is considered more of a pastured cattle pest. They lay eggs only in fresh, undisturbed cow pies. Adult Face Flies will feed on secretions around the mouth, eyes, and nose of cattle on pasture.

Find the right Blueprint for your fly control program:

New EPA approved Blueprint formulas:

- Blueprint® Cattle Mineral ClariFly - #66096
- Blueprint® Fescue Mineral ClariFly - #66097

Existing EPA approved Blueprint formulas:

- Blueprint® Cattle Mineral Altosid - #62423
- Blueprint® Fescue Mineral Altosid - #62425



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EXCITING NEW PRODUCTS THAT ADDRESS SWINE PRODUCER CONCERNS

Managing a nursery feed budget and vice behaviors like tail biting and are challenges many swine producers face. By incorporating years of research and good old-fashioned ingenuity Hubbard Feeds has come up with new solutions to these old problems.



ALLBITE™

AllBite is a molasses-based block designed to discourage vice behaviors, such as tail biting, in pigs. Its unique design and its delivery system attract pigs and encourage them to chew on the block.

AllBite comes in a 23-pound, biodegradable container and is designed to be hung from the fence or the ceiling with a chain. Pigs are attracted to its design and soon begin chewing on the container and block. The convenience of the AllBite block allows for a quick response immediately after tail biting or other vices are seen.

AllBite's convenient chain hanger reduces the possibility of the block getting pushed into a corner and ignored by the pigs. It also keeps the product cleaner, increasing the likelihood that the pigs will continue chewing on the block.

For the most effective results, AllBite should be used at the first sign of vice behaviors.

AllBite can be hung from the fence or ceiling with a chain using an attachment that allows the block to move freely. Hubbard recommends hanging a minimum of 1 block for every 25 grow-finish pigs or breeding animals.



POWERSTART™ SOLO

PowerStart Solo is a ground-breaking, research-proven feed designed to be the sole source of nutrition for pigs weighing 13–25 pounds.

Its efficiency of feed delivery and manufacturing make PowerStart Solo attractive to producers who have multi-fill rooms or nurseries. Feeding a single-phase nursery feed like PowerStart Solo can make it easier to manage feed budgets and the number of days on medication — especially when using a VFD medication.

Hubbard Feeds conducted multiple research trials comparing the performance of pigs fed the PowerStart two-phase program to pigs fed a single phase (i.e., PowerStart Solo) from 13 to 25 pounds of body weight. The results showed comparable costs and performance on a single-phase diet.

PowerStart Solo isn't for every farm. Please contact your Hubbard representative to discuss how PowerStart Solo would fit with your customers' current feeding programs.

New products like AllBite and PowerStart Solo allow Hubbard Feeds to deliver value-added technologies that help our customers increase profitability, reduce risk and make their work/life easier.

For more information on these products, contact your Hubbard Feeds representative.

Wean
Smart
with

POWER
START



COME SEE US!

July 9–11: Hubbard Beef Focus Meeting, Sioux Falls, SD

August 9-11 and 16-18: Game Fair, Anoka, MN (Kinetic)

August 13-16: HIT's Military/Police Working Dog Conference, Chicago, IL (Kinetic)

September 10-12: K9 Cop Conference, Nashville, TN (Kinetic)

September 11-13: Red Angus Convention, Dubuque, IA

September 12-15: NAVDA Nationals, Bloomingdale, OH (Kinetic)

October 2–6: World Dairy Expo, Madison, WI

October 12-13: The International Waterfowl Breeders Association Western National Show, New Ulm, MN



Agriculture is the heartbeat of America – driven by those who cultivate the land and care for animals. Your hard work and dedication builds strength, integrity and character and is an inspiration for the next generation. Through your unrelenting passion and commitment, you feed a growing world – thank you!

Alltech-Mankato, MN office employees salute agriculture and show their spirit and thanks for those who feed a growing world by proudly wearing their Feed the Need Shirts!



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