DAIRY COOLING:

THE BENEFITS AND STRATEGIES

According to "Dairy Cooling: The Benefits and Strategies," heat stress adversely affects dairy cows in a variety of ways. A cow suffering from heat stress:

4,000

Produces less milk - The severity of the effects directly related to heat stress vary significantly by climate, with estimated production losses at dairies without cooling ranging from 403 pounds per cow per year in Wisconsin to almost 4,000 pounds per cow per year in Florida.

Is at a greater risk of contracting a range of debilitating and even deadly diseases – In periods of extreme heat, the resultant heat stress has even led directly to animal deaths. During a 2006 heat wave in California, 25,000 cattle perished.

25,000

59.3

Additional days open

Conceives less often - Heat stress can also have a major effect on reproduction cycles. For example in Florida, cows not subjected to cooling measures have an estimated 59.3 additional days open.

In 2010, economic losses resulting from heat stress were estimated to be $1.2 billion across the entire U.S. dairy sector, an average of $39,000 per dairy.

A 2003 analysis found that providing dairy cows with an optimal level of cooling reduces the total cost of heat stress and its mitigation by an average of 43 percent across the U.S., as compared to if no heat abatement measures were taken.

43%

Clearly, as global temperatures increase and dairies expand to meet a growing demand, the costs of heat stress and the need to mitigate it will increase as well. Fortunately, the effects of heat stress can be reduced by implementing properly designed and operated ventilation systems and employing effective cow cooling strategies.