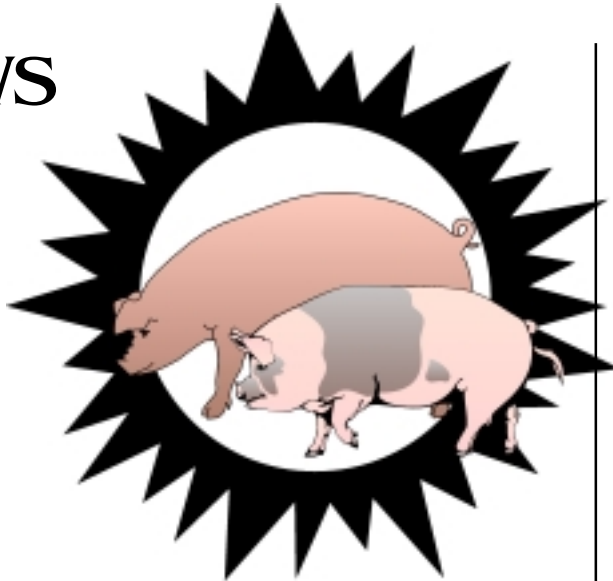


Your Sows and Heat Stress



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The daytime temperatures during summer months can become uncomfortable for people, not to mention pigs. The breeding pig feels comfortable in the range of 7 to 21 degrees Celsius. These are called the lower and upper critical temperatures. In situations where the upper critical temperature is exceeded, sows are likely to suffer from heat stress. If the temperature is high enough the animal dies.

As temperatures rise, a pig will breathe more rapidly to increase the evaporation rate of moisture from its lungs, thereby obtaining a greater cooling effect. When the relative humidity of the barn is high (too much moisture in the air) the cooling advantage from breathing is greatly reduced because the rate of evaporation is low. It is important to ensure that the ventilation in the sow barn is adequate to remove the heat generated by the animals and to reduce the amount of moisture in the barn. Typical hot weather ventilation rates should be 200 cubic feet of air per minute per sow.

Pigs do not have sweat glands. If given a choice, their natural tendency is to seek out water to wet their skin by wallowing. The evaporation of this water lowers skin and body temperatures. Spraying or drip cooling can be used to relieve or reduce heat stress in housed animals. Drip cooling is more suitable to restrained animals such as sows in farrowing stalls.

In conventional swine barns, air temperature, air movement, air speed, radiant temperature, flooring (including the use of bedding), as well as stocking density, influence animal comfort. Before expected warm days, it is advisable to closely examine the conditions that may lead to increased barn temperatures, and take the necessary precautions to eliminate or minimize them.

Pig Production FACTSHEET



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