

Protecting Livestock From Heat

STRATEGIES FOR FARMERS WHEN TEMPERATURES CLIMB

When temperatures and humidity begin to rise in Wisconsin, keep a close eye on livestock.

Temperatures in the high 80s and the 90s can cause problems, as well as a 75 degree F. day coupled with high humidity. Heat stress can cause general discomfort, decline in animal performance and animal death.

PROVIDE SHADE AND NIGHT-TIME COOLING

- ◆ *If animals are kept outside, provide shade during hot weather.* Heat from the sun is a major culprit in overstressed animals.
- ◆ *Swine may sunburn during hot, sunny weather.* Try to keep them out of the sun. Sun shades can cut the radiant heat load by as much as 40 percent; ask your county Extension agent for information on their construction. Pasture wallows are also effective for sunburn protection and wet skin cooling.
- ◆ *Turn cows outside at night to cool them and cool the barn.* Since animals cool themselves primarily through breathing, barns tend to get warm and humid quickly.

PROVIDE ADEQUATE WATER

Ample drinking water is vital to animals during hot and humid conditions. Animals cool themselves by panting (water loss from the lungs) and through water evaporation from the skin. Increased respiration during hot weather is especially important for pigs and other animals that do not sweat. Animals must replace the water loss to cool themselves.

- ◆ *Maintain access to water.* Provide automatic drinking cups so animals can meet their requirements during hot weather.
- ◆ *Keep water containers clean.*
- ◆ *Adjust the drinking space for the size and number of animals in the pen or group.* Excessive volumes of water grow warm and stale throughout the day. (See the fact sheet “Livestock Water and Nutrition.”)
- ◆ *Check the water delivery systems periodically for plugs or other problems.*
- ◆ *If necessary, spray water on animals to cool them.*

PROVIDE GOOD VENTILATION

Proper ventilation helps maintain livestock health during hot and humid weather. Without adequate air exchanges and airflow distribution within livestock buildings, heat and moisture accumulate and animal production is affected. Contact a ventilation specialist to inspect and update your system, if necessary. Your county Extension office also may be able to help you.

BE WATCHFUL

- ◆ *Use the temperature humidity index as a guide to heat stress.* Listen to local or regional weather reports for the temperature humidity index (THI) for your area. Some levels of concern include:
 - a) Above 75 THI - Heat stress on high-producing cows begins to decrease feed intake and lower milk production.
 - b) Above 80 THI - Severe heat stress may occur for cows on pasture. Shade and adequate ventilation are essential to minimize milk loss.
 - c) Above 83-85 THI - Danger of fatal heat stress occurs.
- ◆ *Keep an eye on animals.* If heat stress is a concern, check animal temperature. Dairy cow temperatures approaching 104 to 106 degrees F. are dangerous. At 107 degrees F., spontaneous heart failure is possible. Call a veterinarian and use methods listed above to keep animals cool.

Additional resources:

Your county agricultural agent,
ventilation specialists, your veterinarian

Related publications:

UW-Extension publications—

“When Temperatures Go Up, Does
Your Milk Production Go Down?”
(A2881);

“Cooling Swine,” (PIH87).

Midwest Plan Service publications—

“Heating, Cooling and Tempering Air for
Livestock Housing,” (MWPS-34);

“Mechanical Ventilating Systems for
Livestock Housing,” (MWPS-32).