The Northeast Center for Risk Management Education

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College of Agricultural Sciences

Cooperative Extension Lancaster County

Cow Comfort Considerations

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The amount of comfort that hard working cows experience in early lactation is determined in part by the care they received in the transition period as dry cows and springing heifers. Cows and heifers that calve in good health and in good condition and with aggressive appetites experience less stress at calving time and in early lactation. Calving difficulties and metabolic problems are reduced. Dry matter intakes go up, milk production is greater, conception is improved and cows generally have stronger immune systems and fewer health problems. Thus, when improving the comfort of lactating cows, also consider the comfort of dry cows and heifers. Below is a list of some things to consider.

1. Keep cows cooler by avoiding excess activity and excitement, especially before and after breeding.
2. Water. Plentiful supply, good quality, readily available and easily accessible.
   * Good quality. Clean, good odor and taste. Test for chemicals and bacteria.
   * Easy access. Near shade, feed, rest area and parlor exits. Ample drinking space, no voltage. Cows have ample head room and chain length to reach water bowls and operate valves easily.
   * Good supply and flow rate. Pump capacity, pressure, pipe size, valve sizes, reserve tank size.
3. Shade. Abundant amount of shade in a clean, dry area close to feed and water.
   * Rotate shade areas to keep them clean and dry.
   * Well ventilated barns can provide clean, dry, shaded areas close to good quality water and feed.
4. Rest area. Clean, dry and comfortable.
   * Well sodded area close to shade and water, and possibly a supply of supplemental feed.
   * Well ventilated barns can provide clean, dry, comfortable rest areas close to feed and water.
5. Ventilation. Fresh air and comforting breezes.
   * Open all walls. Curtain walls with 14-16 foot eaves are beneficial.
   * Provide ridge openings - minimum of 6-8 in. and 2-3 in. per 10 ft. of building width.
   * Tiestall barn fans:
     Exhaust fans for spring, fall and winter:
     50 cfm / cow continuous fan plus 100-150 cfm per cow thermostatically controlled fans.
     Tunnel fans for summer:
     Two 52 in. fans per row of tiestalls, located in one end of the barn.
     45-50 sq ft of air inlet per fan at opposite end in wall or in ceiling; no side wall inlets.
     WARNING: an emergency ventilation plan is needed in the event of a power failure.
6. Stall design. Entice usage by cows and first calf heifers. Get up and down easily and no injuries.
   * Comfortable bed. Mattresses with bedding, ample bedding and bedding retainers, etc.
   * Tiestalls. Tie rail 6-8 inches ahead of curb, about 4 ft. wide and 66 in. long (adjust to cow size).
   * Freestalls. Open front (lunge room and air flow), about 4 ft. wide and 7.5-8.0 ft. long, brisket board 66 inches from back of curb and 44-48 in. high neck rail located over the brisket board.
7. Feeding. Fresh feed, fed frequently in clean mangers. Increase energy and mineral density of ration
   * Feed forages when cows cool down, which is about 4 hrs. after air temperatures drop.