

CALVING EASE

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5 Common Pitfalls in Preweaned Calf Care

Every fall season I encounter the same five problems in preweaned calf care. They are:

1. Not enough clean, dry bedding
2. Not enough to eat
3. Not enough coccidiostat consumed
4. Too slow colostrum cooling for stored colostrum
5. Incorrect rinse and wash temperatures for equipment sanitation.

The combined effect of these along with widely fluctuating fall temperatures and, often, wet muddy conditions is an increase in the rate of treatable scours and respiratory illness. So, what can we do to avoid these “pitfalls” and have healthier calves?

Bedding

As temperatures fall below 60 degrees, newborn calves start to burn body stores to supply energy for maintenance. If we can reduce body heat losses, the lower the drain on body stores of energy. One way to cut body heat losses through direct contact with cold surfaces is to have the calf lie on bedding that minimizes heat transfer – dry enough and thick enough. My test of adequate bedding is to kneel on the bedding. Of course, my knees should stay dry. In addition, on a chilly day my knees should start to warm up as I kneel. As Fall progresses, the importance of bedding into which the calf can “nest” increases. The “nesting” effect reduces airflow around the calf decreasing convection heat losses. If sawdust or shavings are used, it may be profitable to consider calf blankets at least for calves less than one month of age.

Feeding

The farther temperatures fall below 60 degrees, the greater the amount of energy from feed that is devoted to maintaining the calf’s core body temperature of 102 degrees. One rule of thumb is to increase feeding by 1 percent for each degree below 60 degrees. Thus, for an average daily temperature of 40 degrees, the feeding rate should go up 20 percent. Or, if feeding at 90 pound calf with the goal of about ½ pound a day gain, the feeding rate for an AM/PM feeding program needs to be 2 quarts for 60 degrees, 2 ½ quarts for 40 degrees, and 3 quarts for 20 degrees. For more information, you may go to www.atticacows.com , type the words energy and calves in the Search box.

Coccidiostat

Fall weather is often stressful for young calves. My rule of thumb for severe temperature change stress is anything over 30 degrees difference in 24 hours. The greater the amount of stress, the greater the degree of immunosuppression. The calves cannot fight off the “bugs” that they normally would shrug off. Often, one of the consequences of these Fall changes is an outbreak of clinical coccidiosis. The amount of coccidiostat being consumed normally would control coccidia growth. Given extra stress, the coccidia grow too rapidly and overwhelm the medication. If a coccidiostat is not fed regularly as part of the liquid feed ration, it may be necessary to either add it to the milk or milk replacer. Or, increasing the rate at which the coccidiostat is added to the calf starter grain may help. For additional information, go to <http://www.calfnotes.com> for CalfNotes #17 & 32. While at CalfNotes site, click on Calving Ease for coccidiosis issues, December '03, November '02 and December '02.

Rinse and Wash Water Temperatures

The most common difficulty in feeding equipment sanitation is using the correct temperature water at the right time. It is always the rule to rinse equipment before washing with lukewarm water (100-115 degrees). It is always the rule to wash equipment in hot water (start at 140 degrees, never below 120 degrees even at the end of washup). As soon as cooler Fall weather arrives, I have observed a tendency at calf operations to increase the temperature of the rinse water and decrease the temperature of the wash water. When chilly Fall weather arrives, the only reliable measure of water temperature is a thermometer – not your hands. Daily use of a thermometer may not be necessary but checking at least weekly will keep us honest. For additional information, go to <http://www.atticacows.com> and type the word washing in the search box.

Cooling Colostrum Rapidly

Cool Fall weather conditions seem to lull us into a sense of complacency regarding cooling colostrum that is to be stored. If we need to wear a sweatshirt, then the air must be cold enough to chill colostrum properly? Well, forget that. Our chilling goal for colostrum to be stored is to get it below 60 degrees within one hour after harvesting. The only way that is going to happen is to get a high level of exposed container surface and a large temperature difference between the colostrum and the medium surrounding it (air, water). A pail sitting in a 50-degree milk house at will not chill colostrum quickly enough to slow coliform bacterial growth. Even putting a pail (3 gallons of colostrum) into a refrigerator will not work – after four hours we found the colostrum temperature was still close to 70 degrees. A pail does not have enough exposed surface – the colostrum needs to be in 2-quart size containers. If the refrigerator is “shock loaded” with lots of colostrum (for example, 8 or 9 gallons), even after 16 hours we have found colostrum still 8 to 10 degrees above the 40 degree refrigerator temperature. Either an ice bath or ice containers in the colostrum may be needed. For additional information, go to <http://www.atticacows.com> and type the words cooling and colostrum into the Search box.

If you know of someone that doesn't currently receive **Calving Ease** but would like to, tell them to **WRITE** to **Calving Ease**, 11047 River Road, Pavilion, NY 14525 or to **CALL** either 585-591-2660 (Attica Vet Assoc. office) or 585-343-8128 (Offhaus Farms Office) or **FAX** (585-591-2898) or **e-mail** sleadley@frontiernet.net or pams91@2ki.net

. A limited number of back issues may be accessed on the Internet at www.calfnotes.com and clicking on the link, Calving Ease. Our thanks to Alpharma for sponsoring this issue of Calving Ease.