

CALF BLANKETS

All of us have heard of calf blankets. Many of us have seen them in use but only a few of us have actually used them. What are they and what are the pros and cons of their use?

WHAT ARE CALF BLANKETS?

They are calf-size coats. Often they fasten in place with straps and/or ties. Velcro is a popular fastener. They are made of insulating-type fabrics such as wool, polyester blends and insulating foams.

Producers prefer those that are machine washable. Costs seem to range from about \$22 to \$40 each.

WHY WOULD A CALF NEED A COAT OR BLANKET?

The obvious answer is to keep warm in cold weather. But, what's "cold" to a newborn calf? There is a temperature range where the amount of body heat produced by a calf is balanced by her body heat losses. That range is called "thermoneutral."

For an eighty-five pound newborn calf this range is about 55 to 78 degrees (assuming she is dry and in a draft-free environment). As temperatures fall below 55 for an extended period of time she has to burn extra energy to maintain her body core temperature.

WAYS HEAT ESCAPES FROM A CALF

Now, let's do a quick review of four ways heat escapes from a calf no matter what the weather.

Evaporation. Heat from her body is used to evaporate water primarily on her skin and hair coat. This is easy to solve at birth. After her dam licks her off, just finish the drying and fluff up her coat.

But, does her housing during the first month provide a dry place to keep out of rain and snow? A water repellent blanket can keep her dryer.

Conduction is another way heat moves away from a calf. Most calves less than a week old spend ninety percent of their time lying down. But, on what kind of bedding are they lying? Dry wood shavings? Dry straw? Wet bedding?

Direct contact with wet straw results in three times as much heat loss (conduction) as contact with dry wood shavings. A moisture repellent blanket can slow down conduction heat losses through damp bedding.

Radiation losses occur when heat is transferred through the air from a warm object (calf) to a cold one (concrete, snow). These losses are reduced for calves if they can lie down some distance away from the cold object. A blanket can serve as an insulating barrier to reduce heat moving away from the calf's body.

Convection losses occur when air passes over the calf's body. On one hand, when the housing is draft-free and a calf can snuggle down into a bed of straw, these losses are minimal.

On the other hand, when the bedding does not allow any hollowed out nest and the pen is wide open for air movement (as in most greenhouse-like structures or pole barns), convection losses can be higher. A blanket can serve to minimize heat loss by radiation that is subsequently carried away by convection.

SO, HOW MAY BLANKETS FIT MY DAIRY?

First, the smaller the calf the greater the potential for her to lose body heat. That's because her ratio of surface to body mass is much greater than for even a 130 pound heifer. These small calves may be the youngest ones or calves with especially low birth weights like twins. Rather than just depending on extra bedding (I always bedding these little girls with an extra flake or two of straw), blankets can be used.

Second, the greater the air movement around the calves, the greater potential benefits of calf blankets. Therefore housing that does not allow calves to seek out a draft-free environment may have considerable potential for calf

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blankets (for example, open pens in a barn). This is especially true for very small and the young calves.

Third, the greater the difference between the calf's body temperature and the air around her, the greater the potential for benefits from using calf blankets. In very cold weather, North Dakota State University researchers demonstrated an increase of 0.2 pounds average daily gain (1.2 pounds without blankets and 1.4 pounds with blankets from birth to four weeks) using blankets in hutch-housed calves.

MANAGEMENT TIPS

Blankets are more effective when put on dry calves rather than wet ones. Aim for a "fluff-dry" hair coat to take maximum advantage of blankets.

The drier and cleaner the blanket, the better it will insulate a calf.

Aim for bedding that keeps blankets relatively clean and dry.

Blankets are most cost effective for short-term use. With a limited number of blankets, give priority in cold weather to blanketing smaller and younger calves.

Commercial Sources of Calf Blankets

Select Sires is the U.S.A. distributor for Woolover brand blankets. See <http://www.selectsires.com/products/otherproducts/woolover.html>

Flyaway calf jacket is a similar construction and is available at 1-888-285-7454, <http://www.animart.com/store/calf-jacket-fly-away/>

AcceleratedGenetics can be contacted at www.accelgen.com or info@accelgen.com or 1-800-451-9275 for their AccelCoat (small and large). The specific calf coat URL is <http://www.accelgen.com/product/detail.aspx?language=english&CategoryID=32&codeid=30&title=AccelCoat/>

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The Calf Cozy is made in Vermont and contact is 877-254-7844 or www.calfcozy.com for their product information (small, large).

Udder Tech, Inc. distributes two sizes of calf blankets and the regular blanket comes also with double insulation. Contact them at 952-461-2890 or <http://www.uddertechinc.com/?q=products/calfblanketreg> or direct e-mail info@uddertechinc.com .

ENR calf blankets is located at 116 James Road, Fort Plain, NY 13339. Phone 518-993-4589. Blankets come in small and large sizes.

Elam G. King makes three sizes of calf blankets. Contact at 116 James Road, Fort Plain, NY 13339. Also available through Currey Farms, 712 Flat Iron Road, DE 19952 302-542-4793

If you know a reliable supplier I would like to add them to this list. Contact me at smleadley@yahoo.com; mobile 585-356-0769, fax 585-591-2898.

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