Dealing with the Poultry Litter Ban

By Jackie Nix

The January 26th 2004 U.S. Food and Drug Administration announcement* of a proposed ban on the feeding of poultry litter to ruminants will hit close to home for many producers. Many southern cattlemen have traditionally utilized poultry litter as a part of their winter rations. As such, those that had previously utilized poultry litter must now find suitable substitutes.

Why will Poultry Litter be Banned?

Poultry litter may be banned as a legal feed for ruminants to further strengthen the United States BSE (Mad Cow Disease) firewall for preventing the spread of this disease. Poultry litter consists of bedding, spilled feed, feathers, and fecal matter that are collected from living quarters where poultry are raised. Poultry feed may legally contain protein that is prohibited in ruminant feed, such as bovine meat and bone meal. The concern is that spillage of poultry feed in the chicken house occurs and that poultry feed (which may contain protein prohibited in ruminant feed) is then collected as part of the "poultry litter" and added to ruminant feed.

What will This Mean for Cattle Producers?

Cattle producers that have traditionally utilized poultry litter as a source of protein will need to find suitable alternatives. In order to make informed decisions regarding nutritional alternatives, it is necessary to understand some of the basics of cattle nutrition. Cattle are ruminants, meaning that they have a stomach with four compartments. The first and largest compartment, the rumen, acts as a large fermentation vat that houses a population of bacteria and protozoa. The last compartment, the abomasum or true stomach, functions similar to a human stomach. Cattle require proper amounts of five classes of essential nutrients in order to thrive and achieve maximum production and efficiency. These nutrients are energy, protein, minerals, vitamins and water.

Energy is the first limiting nutrient in a cow's diet and represents a major portion of a cow's needs. Energy is the "fuel" that allows a cow to function. Energy needs are typically expressed in terms of total digestible nutrients (TDN). Most of the energy needs of cattle are met through the fermentation of forages and roughages in the rumen, allowing cattle to utilize feeds that are useless to non-ruminants. Other energy sources include carbohydrates (primarily supplied by grains), sugars (from sources such as molasses) and fats.

Protein is composed of amino acids, which the animal uses as "building blocks" for body tissues. In ruminants, the bacteria and protozoa in the rumen actually digest forage protein and convert it into microbial protein. This microbial protein is then digested and absorbed in the abomasum and small intestine. These microorganisms are capable of converting non-protein sources of nitrogen (NPN) such as ammonia and urea, into the

same microbial protein under normal conditions. This was the advantage of utilizing poultry litter in mature ruminant diets. Since the cow cannot differentiate between the microbial protein produced from natural forages and that produced from NPN, poultry litter supplied protein equivalent to good quality hay when energy levels were adequate. Utilizing the same principles, urea is often added to feed supplement as a way of economically increasing effective protein levels. Because a functioning rumen with a good population of microorganisms is necessary to effectively convert NPN into protein, it is advised that NPN-containing supplements be utilized for only mature cattle. Lightweight, growing cattle cannot adequately utilize NPN and benefit more from receiving supplements containing natural protein.

Minerals and vitamins are also essential to proper nutrition. Since mineral and vitamins levels vary in forages and feeds, always provide free choice access to a complete mineral and vitamin supplement containing salt to avoid deficiencies in your cattle. Avoid use of plain white salt blocks or trace mineralized salt blocks.

Water is often overlooked as a nutrient but is vitally important for cattle nutrition. Clean water is most important to young, growing calves. Inadequate water consumption will limit feed intake and reduce growth and performance. In general, cattle drink about ½ gallon water per lb. of dry matter intake (~ 10 gallons/day for a 1000 lb. mature cow); however, water needs will vary considerably with temperature and other factors.

Coping Without Poultry Litter

Since cattle producers may be unable to utilize poultry litter as a protein source, alternate protein sources need to be secured. The most obvious alternative feed is good to excellent quality hay. Good to high quality hay is an excellent feed source for cattle. However, hay quality varies greatly from year to year and even cutting to cutting. Environmental factors like drought or excess rains can adversely affect hay quality, as well as man-made factors like improper fertilization and harvesting.

Because hay represents such a large portion of a cow's diet and hay quality varies so much, it is strongly recommended that you chemically analyze your hay source(s) for nutritional content. This service is modestly priced and will save you money in the long run. By testing your hay, you will know its exact nutritional content and will allow you to make better management decisions. Contact your local Sweetlix dealer or local Extension agent to learn more about this service.

Knowing the nutritional content of your hay will allow you to more efficiently allot hay according to cattle needs. As a rule of thumb, young, growing bulls have the highest protein and energy requirements and should get the best quality hay, followed by young, growing steers, replacement heifers, lactating cows, dry cows and mature bulls. Knowledge of the nutritional content of your forages will also allow you to save money by purchasing the correct supplements to meet the needs of your cattle – no more, no less.

What are Some Other Good Alternatives?

Nutritional supplements come in all shapes and sizes and range from commercially produced tubs, blocks or pellets to natural feedstuffs known to be relatively high in protein such as soybean meal or cottonseed meal. Choosing which type is best for your operation will vary according to individual circumstances. In many cases a variety of

supplement products will best meet cattle needs. Contact your local Sweetlix® representative for more information.

Protein Supplements Available from Sweetlix®

Sweetlix® offers a wide variety of protein supplement products to allow the greatest amount of flexibility for cattle managers. Here are a few of the Sweetlix® cattle supplements available through your local Sweetlix® dealer.

EnProAl® 16% Supplements

- All natural protein supplements ideal for all classes of cattle
- Delivers same amount of magnesium as high-mag minerals to help protect against grass tetany
- 55 to 60% TDN – up to 15% more than "poured" blocks formulas
- Regular and consistent consumption of 1-2 lbs per head per day
- Predictable feed costs
- Convenient, self-fed tubs – no labor supplementation option
- Deliver twice as much protein daily as compared to all-natural low moisture tubs
- Recommend use of an additional complete Sweetlix® loose mineral supplement for optimum forage utilization

EnProAl® 20% Supplements

- All natural protein supplement ideal for all classes of cattle
- Delivers same amount of magnesium as high-mag minerals for grass tetany protection
- 55 to 60% TDN – up to 15% more than "poured" block formulas
- Regular and consistent consumption of 1-2 lbs per head per day
- Predictable feed costs
- Convenient, self-fed tubs – no labor supplementation option
- Deliver twice as much protein daily as compared to all-natural low moisture tubs
- Recommend use of an additional complete Sweetlix® loose mineral supplement for optimum forage utilization

EnProAl® 24% Roughage Converter Supplement

- Ideal for cattle on low quality forages
- Added non-protein-nitrogen for optimal forage utilization and economical feed conversion
- Convenient, self-fed supplement
- Higher protein delivery than comparable low-moisture tubs
- Deliver same amount of magnesium as high-mag minerals
- Predictable feed costs
- Recommend use of an additional complete Sweetlix® loose mineral supplement for optimum forage utilization

Foragemax 25%

- Ideal for cattle on low quality forages
- Added non-protein-nitrogen for optimal forage utilization and economical feed conversion
- Convenient, self-fed supplement

- Higher protein delivery than comparable low-moisture tubs
- Deliver same amount of magnesium as high-mag minerals
- Predictable feed costs
- Should not be used with horses or young cattle with immature rumen function
- Recommend use of an additional complete Sweetlix® loose mineral supplement for optimum forage utilization

VMS® Kowpoke 37% Pressed Block

- Smaller size (33.3 lbs) easily maneuvered without heavy equipment
- High protein with added NPN ideal for mature cattle on poor quality roughages
- Predictable feed costs
- Weather-resistant blocks can be placed right out in the pasture with cattle

VMS® 25% Natural Protein Block

- Smaller size (33.3 lbs) easily maneuvered without heavy equipment
- High protein content ideal for supplementation of mature cattle on poor quality roughages
- All natural protein sources – safe for pastures containing horses or young cattle
- Predictable feed costs

EnProAl® 25% PLUS Supplement

- A complete protein/energy/mineral/vitamin supplement in one convenient tub
- Delivers recommended levels of Optimin® proteinated trace minerals for increased reproductive performance
- 15% more energy than competitor chemical blocks
- Higher protein delivery than comparable low-moisture tubs
- Regular and consistent consumption of 1-2 lbs per head per day
- Predictable feed costs
- Convenient, self-fed supplement

In summary, the possible ban on feeding of poultry litter will impact many southern cattlemen. Alternate protein sources will need to be utilized. Ideally, cattle producers should maximize use of high quality forages and hay. However, when hay quality is lacking, nutritional supplements are necessary to maintain reproductive and growth performance. Feed supplements pay for themselves in added production when used properly. For more information about any Sweetlix® protein supplement product for cattle and information to help you decide how they will fit into your management situation, contact your local **Sweetlix®** representative or call **Sweetlix®** at 1-87SWEETLIX.

**For additional information about the proposed poultry litter ban go to http://www.hhs.gov/news/press/2004pres/20040126.html.*

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