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Using manure to reduce input risk

By James Sedman and John Hewlett

Fuel, fertilizer, and other input costs rose to previously unthinkable high levels in 2008.

Not only did producers face increased risk associated with volatile commodity prices, they also experienced increased risk associated with input variability and cost.

This year, while commodity prices may have decreased dramatically, input costs have not. For example, while anhydrous ammonia is off its high of last fall of around $1,200-1,300 per ton, it is still historically expensive at $400-500 per ton.

Fertilizer availability became an issue over the past year as well, further increasing risk exposure. One way crop and livestock producers might consider managing input risk while still applying effective fertilizer is to consider adding manure to the crop plan. Not only can manure provide a cost-effective means to apply the necessary soil nutrients, but it can also provide secondary benefits as well.

Benefits of Applying Manure

Using manure can be a cost effective source of nitrogen and phosphorous. It may also be a great source of organic matter and provide increased soil microbial activity. Farmland in Wyoming is typically lacking in adequate organic matter. Manure may help reduce wind and soil erosion as well. New research shows the application of manure can benefit a wide range of crops, such as alfalfa and other hay, as well as cereal grains. For example, new seedling alfalfa can benefit more from as much as 50 tons of dry manure per acre that has been applied and incorporated before planting than commercial fertilizer at the same nutrient levels. In areas with higher concentrations of livestock, such as feedlots or dairies, custom manure application can be a great way for neighboring farms to help manage manure supplies.

Keep in mind uncomposted manure can harbor viable seeds of many types. This can increase the cost of weed control for subsequent crops. The use of composted manures can help to reduce weed control costs.

Compare Costs

A good first step in deciding whether to use manure is to fully determine fertilizer costs. A soil test should be taken to accurately establish the level of added nutrients needed for the planned crop. Next, estimates should be made for losses for such things as volatilization after application, application costs, and other associated costs of getting the fertilizer ready for access by the crop. The final per-acre fertilizer cost estimate will be used to compare with manure.

To better understand the economic level of fertilization for various crops, the reader may benefit from exploring the University of Wyoming "Fertilizer – How Much Can You Afford to Apply?" Web pages at http://agecon.uwyo.edu/farmmgt/Software/fertilizer/FertilizerCalculator.htm.

The next step is to determine application costs of the manure. The manure to be applied should first be tested following procedures outlined by a testing lab. If testing is not possible, general nutrient data is available. The rule of thumb for nutrient content is 8-10 pounds of nitrogen, 10-20 pounds of phosphorous, and 10 pounds of potassium per ton of beef manure. These figures vary (sometimes greatly) depending on livestock rations and other factors.

Estimate Needed Application Rate

Once the nutrient content is determined, estimate the needed application rate. It is also important to learn if your state or local area has any manure application restrictions when setting application rates. This is followed by the most variable cost: transportation and application. Transportation and application costs can vary greatly by area – anywhere from $1.50 to $4 per ton applied and are further influenced by the proximity of the manure to the field as well as current fuel prices.

For example, consider a farm that needs to apply 150 pounds of nitrogen for an intended corn crop. At last year's fertilizer prices, this equates to roughly $75 per acre.

This same farm has manure available for free from a local feedlot that is estimated will cost $3 per ton to haul and apply. If the manure contained 8 pounds of nitrogen per ton, the equivalent manure cost would be about $57 per acre if applied at a rate of roughly 19 tons per acre. In addition, there are a number of other benefits from the manure beyond the nitrogen it supplies. In this case, manure may be a better fit for the farm. Utilizing the manure may not only cut costs but also reduce risk while not decreasing production.

For more information on this and other management topics on the Web, visit the University of Wyoming Soils Resource Program at uwadmnweb.uwyo.edu/soilfert or the Western Risk Management Library at agecon.uwyo.edu/RiskMgt.

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NCBA convention great place to learn more about cattle industry

By Hudson Hill

Trying to guess what cattle markets are going to do and what the best way is to produce and market cattle have always been an integral part of the industry.

Trying to do so the last several years has been like trying to guess lotto numbers. The industry has seen one change after another – most of them outside the cattle industry's own control. The list includes closed export markets, ethanol competition for corn, and both low and high fuel costs.

Trying to make sense of it on my own has made little sense. These were some of the reasons I was looking forward to attending the National Cattlemen's Beef Association (NCBA) Trade Show and Cattle Industry Convention.

The 2009 NCBA annual conference was in Phoenix, Arizona, January 27-31. This year's theme was "A New Day in the Sun." The conference allows for dozens of different producer, committee, and industry meetings to take place during the week, all of which can be very productive; however, for educational opportunities, the three events I enjoy most are the Cattlemen's College, the NCBA Trade Show, and the update from CattleFax services.

Cattlemen's College

This was my second opportunity to attend the Cattlemen's College, and I have found the classes informative. The college is divided into six classes, and attendees have the option of choosing multiple topics within each class. Opportunities included marketing success stories, cost management strategies, rediscovering the stocker segment, intergenerational communications, range and pasture monitoring systems, stocker receiving and health management, financial management, sharing the beef story, cooking with the culinary team, fleet management, and ranch horsemanship to name a few.

The Cattleman's College offers a chance for a person to get viewpoints and information from experts around the country. The take-home message at this year's college was that producers not only need to manage operational costs but actively seek marketing opportunities and agreements that will add value to their production.

Trade Show

The NCBA Trade Show would be enough for anyone interested in the beef industry to attend. It allows producers the opportunity for hundreds of contacts and to see dozens of different companies that serve the industry today. There is booth after booth with sales representatives and professionals eager to explain what their company does for the beef industry. In fact it would be hard to try to find an area of the industry not represented. If a person wanted, they could spend an entire day just visiting all of the different vendor booths. New ideas and new products can be found in the different booths.

CattleFax

CattleFax gives an update at the NCBA convention each year. This year's update seemed both realistic and optimistic. CattleFax briefly gave a summary of what had happened in the beef industry the last year. They then presented their outlook of where they believe the industry is at this time and where it is headed. The highlights were we should see little to no growth in cattle numbers, beef supplies have declined, beef demand is expected to be down in 2009, grain prices will remain high, and trade imports should grow in 2009. I believe it is important for producers to think about aspects like these that affect the cattle market and try to manage their businesses accordingly.

As I reflected on my experience at the 2009 convention, the feeling was positive. The past has been tough, but the future does have some bright spots: exports are picking up, there are premiums available in the markets right now, and it doesn't appear the stock market can affect the industry the way it has the past year with the "perfect storm."

If you get the chance to attend a national NCBA conference, I would encourage you do to so, especially if it is in Phoenix or another "hot spot" in January.

(Note: next year's NCBA Trade Show and Cattle Industry Convention is January 27-30 in San Antonio, Texas. For information, see www.beefusa.org/convcattleindustryannualconventionandncbatradeshow.aspx)

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