



Beef Tips

May 2007

Department of Animal Sciences & Industry

www.asi.ksu.edu/beeftips

Upcoming Events

Beef Improvement Federation

June 6-9, 2007

Fort Collins, CO

www.beefimprovement.org/convention.html

details on page 3

Applied Reproductive Strategies in Beef Cattle Workshop

September 11-12, 2007

Billings, MT

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Third-party certification claims add value

Sandy Johnson, *livestock specialist*

Multiple research studies report that preconditioned calves are worth more post weaning as a result of lower treatment costs, better performance and higher quality grades at harvest. However, many producers that sell calves at or shortly after weaning have not adopted the practice of preconditioning because they argue that they don't get paid for their efforts.

Evidence that there are opportunities to get paid for preconditioning are apparent in a report from Colorado State University reviewing price of calves marketed through Superior Livestock Auction from 1995 to 2005. Calves weaned 45 days with a complete preconditioning program were worth \$7.91/cwt more than non-weaned calves with no health claim in 2004. Vaccinated but unweaned calves brought a \$3.47 premium. The proportion of calves sold with no viral vaccination has decreased from 45 percent in 1995 to 5.4 percent in 2004. The full report can be found at:
www.selectvac.com/images/SV_2005_01.pdf.

Despite the availability of this type of market, the majority of feeder cattle are still sold through local auction barns. In this venue health claims often come from the auction block, something like "they've had all their shots"; the seller's word providing the verification of the health program. An Iowa State University study set out to compare certified health claims with various levels of uncertified claims of calves going through nine auction markets in Iowa. A certified health claim was one that could be verified through a third party such as a state-sanctioned program or private company program with specific documented protocols. Data included 20 preconditioned, 5 featured and 80 special sales representing 20,051 lots of calves sold in Iowa from Oct. 20, 2005 through

Feb. 24, 2006. Lots represented 41 percent certified vaccinated and weaned, 24 percent uncertified vaccinated and weaned, 22 percent vaccinated but not weaned, 4 percent weaned but not vaccinated, and 9 percent neither vaccinated nor weaned.

In this study, calves with certified vaccination claims and weaned at least 30 days brought a premium of \$6.15/cwt over the base of not vaccinated and not weaned. Calves with uncertified claims of vaccination and weaned at least 30 days received \$3.40 more than the base, significantly less than the certified claims category. Calves with only vaccination claims brought \$2.42 more than the base. Calves with only weaning claims received \$1.70 more than the base.

The study also reports the impact of a variety of other variables such as gender, lot size, and month of sale on sale price. All together the variables studied accounted for 71 percent of the variation in sale price. The complete report can be found at:
www.iowabeefcenter.org/content/IBC30.pdf.

While these reports give producers an idea of what is possible, one should not expect that they can drop calves off at the sale barn on any given day and receive this type of premium. Buyers that are interested in weaned and vaccinated calves will be looking for sales where significant numbers of preconditioned calves will be available at one time. For any sale to be successful, the buyers that are interested in that particular offering must be represented. Each producer needs to estimate

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Wet distiller's grain storage life increased when mixed with dry forage

Sandy Johnson, *livestock specialist*

Many producers are wondering about the increasing availability of ethanol by-products and if they will be a viable option for their operation. The growth of the ethanol industry has impacted the price of corn and other widely used feedstuffs. Weather conditions have contributed to higher prices for alfalfa hay in some areas but it is unclear what the impacts of increased ethanol production will have on the hay market in the long run. While by-products are often a low cost option, pricing relationships may develop which favor other feedstuffs.

Table 1 shows equivalent prices of wet (WDG) and dried distiller's grain (DDG) and alfalfa compared to soybean meal when used as a protein supplement. In general, distiller's grain would be considered a protein supplement when used at less than 15% of the ration dry matter. Transportation, storage, feeding and waste issues should also be weighed into the choice of supplements.

Table 1. *Equivalent values of protein supplements compared to soybean meal (SBM) on a crude protein (CP) basis^a.*

\$/lb CP, DM	\$/ton as fed			
	SBM	DDG	WDG	Alfalfa
0.18	150	94.80	36.87	53.72
0.20	170	107.44	41.78	60.88
0.22	190	120.08	46.70	68.05
0.25	210	132.72	51.62	75.21
0.27	230	145.37	56.53	82.37
0.29	250	158.01	61.45	89.54
0.32	270	170.65	66.36	96.70

^aSBM: 48% CP, 89% dry matter (DM); DDG: 30% CP, 90% DM; WDG: 30% CP, 35% DM; Alfalfa: 17% CP, 90% CP

The use of wet distiller's grain has generally been limited to those that can feed 50,000 lbs or more within 3 to 7 days. The supply of wet distiller's grain is generally higher in the summer months when fewer cattle are typically on feed and the storage life of the product is only a few days. A storage

method that would take advantage of higher supplies in the summer and allow variable usage rates would be helpful to many cattle operations.

Research has shown that wet distiller's grain does not spoil over time if oxygen can be excluded. Large storage bags will keep out oxygen and prevent spoilage; however, these bags can split during or shortly after the bagging process for wet distiller's grain at 35 percent dry matter. Some plants produce a modified wet distiller's grain that is 50 to 55 percent dry matter that can be bagged successfully.

University of Nebraska researchers experimented with mixing grass hay, wheat straw or alfalfa hay with wet distiller's grain for storage in silo bags or bunkers. Wet distiller's grain and each of the various ground forages were mixed in a feed truck before feeding into the bagger. When bagging each of the mixtures, the bagger was held at a constant pressure of 300 PSI. If too little of one of the forages was added, the shape of the bag was flatter and/or the bag split open. Table 2 represents their recommendations after trying several different ratios with each of the various forages.

Table 2. *Wet distiller's grain plus solubles ingredient combinations when stored in a silo bag or bunker silo.*

Product	Bag ^a		Bunker	
	Percent of product			
	Dry Matter Basis	As Rec'd Basis ^b	Dry Matter Basis	As Rec'd Basis ^b
Grass Hay	15	6.5	30 - 40	17
Wheat Straw	12.5	5.5	25 - 32	13
Alfalfa Hay	22.5	10.2	45 - 55	
DDG	50	28		
CGF ^c	60	53.8		

^a300 PSI

^bWet distiller's grain at 35% dry matter basis (DM), 65% moisture

^cCGF = Corn Gluten Feed

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Storage Life Increased from page 2

More ground forage was needed when mixed with the wet distiller's grain and placed in a bunker compared to the bags. Without enough dry forage, the mixture was more difficult to drive on for packing purposes. Mixtures packed in a bunker should be covered with plastic to exclude oxygen and prevent spoilage. A more detailed report of this research including photos is available on line at: <http://beef.unl.edu/byproducts.shtml>.

Individual producers have reported success with mixing ground hay or straw and wet distiller's grain with a front end loader or layering the forage and wet distiller's grain. It is not known if the layered product will be as consistent at feed out as compared to that mixed prior to being packed.

Depending on the material mixed with the wet distiller's grains, the end product will be higher in crude protein when stored in bags than bunkers because of the higher wet distiller's grain content. In one case, 60 percent wet distiller's grain and 40 percent straw, blended with a mixer wagon and packed in a bunker, resulted in a product that was 38 percent dry matter and 20 percent crude protein.

Minimizing feed costs while achieving the desired level of animal performance is important to profitability. Because of the high moisture content in wet distiller's grain it is important to make nutrient or cost comparisons on a dry matter basis. Storing wet distiller's grain in either bags or bunkers may prove to be a cost effective method to provide protein and/or energy supplementation to cattle.

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their own costs to determine whether to participate. For more budget considerations of preconditioning see materials by Dhuyvetter et al at: <http://www.agmanager.info/livestock/budgets/production/default.asp>.

If calf prices decline over the next several years as many expect, increasing the value of calves through a certified health program or other value added programs is one method to lessen the impact. Participating in certified programs does take some advance planning so now is a good time to be thinking about ways to enhance the value of your calf crop.

BIF to meet in Colorado for ruby anniversary

The Beef Improvement Federation (BIF) will return to its roots to celebrate its 40th anniversary June 6-9. Producers will gather in Fort Collins, Colo., for the 39th Annual BIF Research Symposium and Annual Meeting. The event will be hosted by Colorado State University, the Colorado Livestock Association, the Colorado Cattlemen's Association and BIF.

The event begins with an opening reception Wednesday evening, followed by a symposium sponsored by the National Association of Animal Breeders (NAAB). The symposium will feature 40 years of artificial insemination (AI) and making money with commercial AI. General sessions Thursday and Friday will focus on "Performance Programs at a Crossroads" and "Challenges to Conventional Wisdom." Conference presenters will take a critical look at current methods of beef cattle evaluation and incorporation of new tools in genetic evaluation.

BIF will honor several individuals, including its seedstock and commercial producers of the year. A spouse's tour Thursday will visit Estes Park and Rocky Mountain National Park. Two tours are available Friday — the Beef Industry Players Tour and the Seedstock Alliances Tour.

For more information about the conference, contact Willie Altenburg, 2007 BIF committee chairman, at 970-568-7881 or willie@rmi.net or Mark Enns at 970-491-2722 or mark.enns@colostate.edu.

Angus Productions Inc. (API), publisher of the Angus Journal and the Angus Beef Bulletin, will present online coverage of the 2007 BIF annual meeting at <http://www.bifconference.com/>.

Adopting animal identification systems and services in Kansas auction markets

A new report entitled “Adopting Animal Identification Systems and Services in Kansas Auction Markets; Cost, Opportunities and Recommendations” by Bolte et al., is now available online at:

<http://www.agmanager.info/livestock/budgets/production/Animal%20Systems.pdf>.

Information from the report comes from a NAIS pilot project in which systems to read radio frequency ID tags were installed in several Kansas sale barns. The report reviews a process livestock auction markets should consider before adopting an electronic

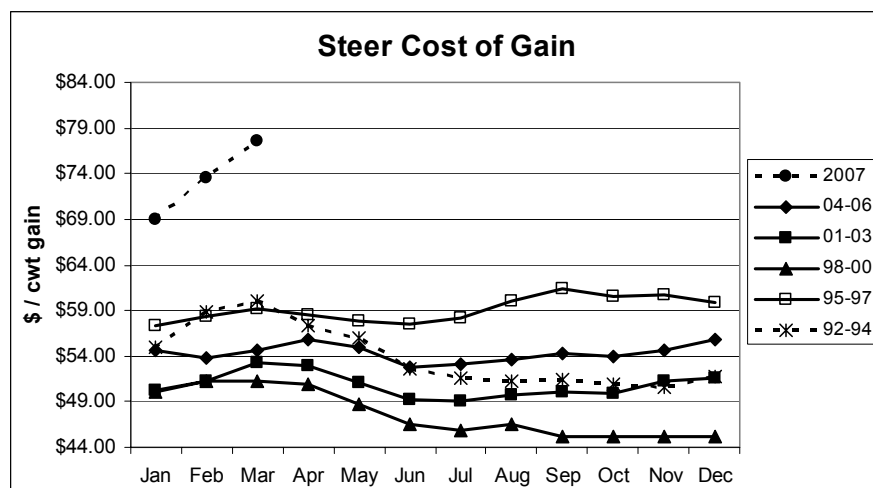
identification system. A summary of costs of facility modifications and equipment needs for markets that have adopted animal identification recording systems is provided. Also included is an overview of some of the concerns and opportunities associated with a livestock auction market investing in animal identification systems. Recommendations are made for auction markets considering adoption of NAIS technology and related services.

Estrus synchronization protocols and information

Current estrus synchronization materials can be found online at www.oznet.ksu.edu/nwao/livestock.htm. The Beef Reproduction Task Force has a four-page fact sheet that describes the recommended protocols (updated Sept. 2006). These protocols are the same as those outlined in materials from the four major semen providers. Revisions have been made each of the past several years, so check the date to make sure you have the most recent materials. To simplify planning and scheduling

programs see the link for the [Iowa State Estrus Synchronization Planner](http://www.oznet.ksu.edu/nwao/livestock.htm). This tool produces a printable calendar that is very useful for ensuring the selected protocol is administered on the correct schedule. Other titles available include; Tips for a Successful Synchronization Program, The Bovine Estrous Cycle, Detection of Standing Estrus in Cattle, and Costs and Comparisons of Estrus Synchronization Programs. For more information contact Sandy Johnson, sandyj@ksu.edu or 785-462-6281.

Steer cost of gain from Focus on Feedlots



The steer cost of gain graph above is an example of the historical data summarized from monthly close out reports provided in Focus on Feedlots. Other charts and tables can be found at <http://www.oznet.ksu.edu/swao/livestock/focusonfeedlots/>. To receive the monthly closeout data via e-mail contact Linda Siebold at lsiebold@ksu.edu or 785-532-1281.