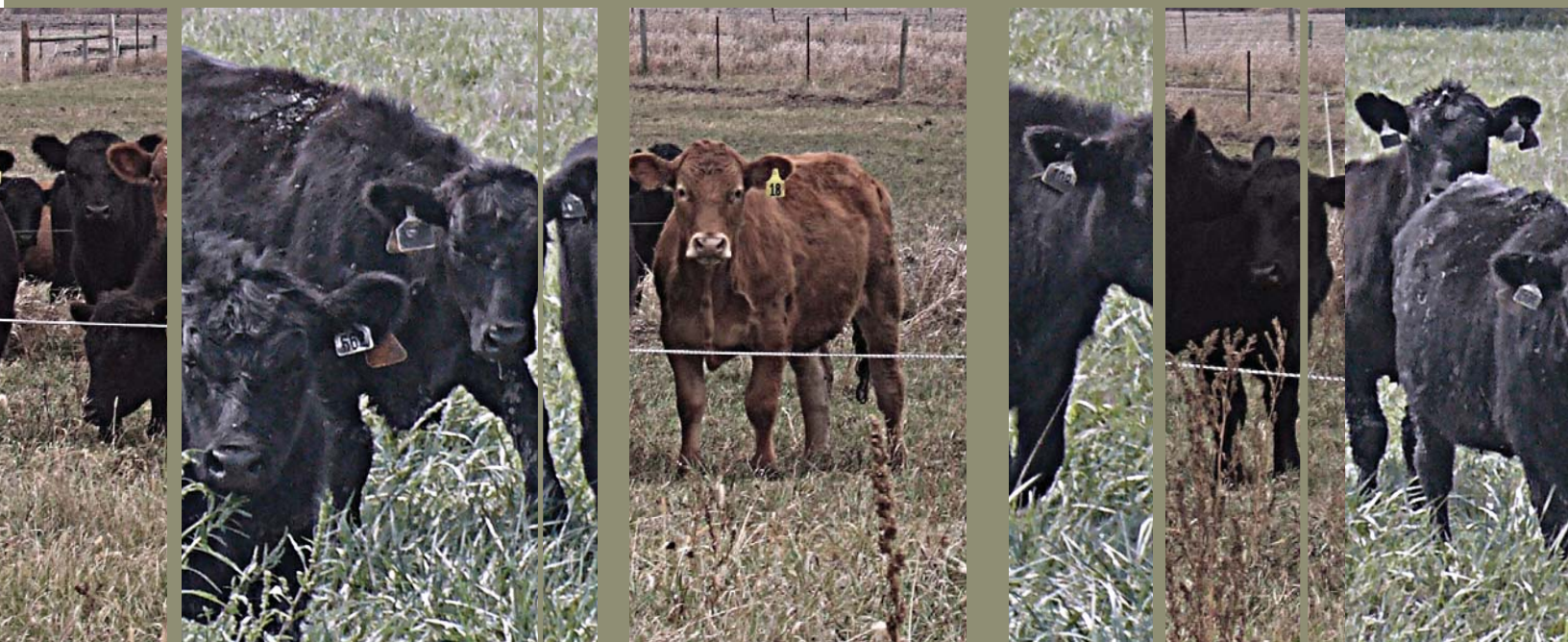


doing business in an
information-based
marketplace



iowa beef center at iowa state university
2010 winter cow meeting series
jan. 21 - feb. 24, 2010



Coalition to Support Iowa's Farmers

The Coalition to Support Iowa's Farmers (CSIF) was launched in May 2004 for the purpose of helping farm families raise livestock responsibly and successfully.

To date, the Coalition has assisted more than 1,300 farm families who raise livestock:

1. Follow all rules and regulations (there are nearly 180 type-written, single-spaced pages applicable to most families who raise livestock);
2. Find good locations for new livestock farms by conducting community assessment models that take into account the proximity of neighboring residences, towns, roads, parks, churches and other public use areas as well as topography and prevailing wind directions;
3. Enhance relationships with neighbors by fostering better and more timely communication about the construction of new livestock farms, participating in community discussions and networking with members of the news media to discuss intentions about moving forward on new livestock farms and;
4. Safeguarding air, soil and water quality by planting vegetative environmental buffers around new and existing farms and properly using manure as a nutrient resource to grow crops.

The Coalition to Support Iowa's Farmers is a non-partisan, not-for-profit organization that does not lobby, develop policy or maintain a membership base. CSIF is a collaborative, proactive initiative involving the Iowa Cattlemen's Association, Iowa Corn Growers Association, Iowa Farm Bureau, Iowa Pork Producers Association, Iowa Poultry Association, Iowa Soybean Association and Iowa Turkey Federation. Many individual farm families and Iowans also support the work of the Coalition.

All services provided by CSIF are offered to farm families at no cost.

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What people are saying about the Coalition to Support Iowa's Farmers

“The Coalition’s work is critical given the complexity of today’s regulations governing animal agriculture, the desire of farm families to do things right and the importance of sustaining a strong livestock industry to the betterment of our economy, including Iowa’s booming renewable fuels sector. It’s an important effort at a critical time for Iowa’s livestock and poultry farmers.”

Bill Northey, Iowa Secretary of Agriculture

“The fact that there’s an organization helping address the needs and expectations of both livestock farmers and their neighbors is extremely beneficial and speaks to the need for a shared approach in helping grow one of Iowa’s most important businesses.”

Keith Sash, member of the Tama County Board of Supervisors

“There’s a huge value to farmers in having an organization like the Coalition to use as a sounding board when making decisions. No one had the information that CSIF did in terms of knowing the issues, who the experts are and where to go for such things as financing, facility design and construction. But more than that, CSIF has helped farmers like me have the confidence we need to forge a future in raising hogs.”

Stuart Swanson, Galt (Wright County). Swanson grows crops and markets 1,100 hogs annually through Lewright Meats, Eagle Grove

“We called on the coalition very early when we had questions about a regulatory issue. We wanted to do things right and the Coalition responded quickly with information we needed. We learned right away that the coalition is a dependable place to go and its assistance was extremely valuable for my family.”

Jim McKnight, Union County grain and livestock farmer

“Work conducted by the Coalition on behalf of Iowa and Iowa farmers is priceless and it’s helping keep families on the land and viable in their communities. With the increasingly complex and costly regulations covering animal agriculture, farmers can use some assistance and the Coalition’s providing it directly to the families that need it most.”

Rep. David Deyoe, a corn, soybean and hog farmer from Nevada (Story County) and Iowa legislator

“Thank you! Thank you! It means so much to think that we have a child and spouse wanting to carry on the work Ed and I have worked hard to keep for the next generation. It’s heart-warming to know Kendra’s dream may be coming true by moving ahead on her new hog farm. All that girl has ever talked about was to come back home and farm with her dad. Because of the Coalition’s work, we’re making that happen!”

Pam Elmore, Jefferson (Washington County)

“I’ve had the opportunity to work with a lot of great athletes and they all had one thing in common... a desire to work together as a team to achieve success. The Coalition is applying that same team approach to livestock farming.”

***Bill Fennelly, Head Coach
Iowa State University women’s basketball***

Iowa Beef Center's Winter Cow Meeting Series

table of contents

- 2-3 Winter Series Sponsor Information: Coalition to Support Iowa's Farmers
- 5 Winter Series Meeting and Proceeding Summary
- 6-34 Proceedings Articles
 - 6 Increasing the Value of Feeder Calves with Sensible Health Practices, Grant Dewell, Iowa State University Extension
 - 8 Capturing the Potential Value of Feeder Calves, Daryl Strohbehn, Iowa State University Extension
 - 12 Backgrounding Systems – Adding Value, Adding Pounds, Dan Loy, Iowa State University Extension
 - 17 Calf Marketing and Backgrounding in Fall 2010, Shane Ellis, Iowa State University Extension
 - 19 Cattle Market Situation and Outlook, 2010 and Beyond, John Lawrence, Iowa State University Extension
- 35-49 Appendices
 - 35 Appendix A: The Value of Third-Party Certification Claims, Iowa Beef Center
 - 41 Appendix B: Listing of USDA Approved Process Verified Programs
 - 42 Appendix C: Dispelling the Myths About Livestock Marketing Programs for Producers

about the Iowa Beef Center

The Iowa Beef Center at Iowa State University in Ames, Iowa, serves as the university's extension program to cattle producers. Our center is comprised of a dedicated group of faculty and staff from the College of Agriculture and Life Sciences, the College of Veterinary Medicine and Iowa State University Extension. We work together to develop and deliver the latest in research-based information to improve the profitability and vitality of Iowa's beef industry.

At the Iowa Beef Center, we strive to be the No. 1 source "For all things beef."

Doing Business in an Information-Based Marketplace

IBC Cow-Calf Series

January-February 2010

Cow-calf producers are always interested in improving the “bottom line” of their beef operations. Most producers aren’t fussy how this gets accomplished—whether it be through controlling costs, improving productivity, or increasing the value of the end product. In reality, it will likely be a combination of these management approaches that will improve the profitability of the operation.

The “Doing Business in an Information-Based Marketplace” series will address selected cow-calf topics focusing on adding value to the calf crop—and therefore improving the operation’s profit potential. These topics include a discussion on health programs, tips on adding calf value, backgrounding systems, a beef industry and market outlook presentation, and a discussion highlighting the potential of an information-based marketplace.

The presentation addressing the “information-based marketplace” will provide a number of alternatives that can add value to a beef cow-calf marketing program. Slides of the PowerPoint discussion are printed in these proceedings (starting on page 23). Included are slides that highlight selected information from the summaries of several auction market surveys—including three conducted by Iowa State University, Cattle Fax, and Montana State University. This information identifies a number of factors common to many Iowa operations that impact calf value. Plus, the surveys quantify the value of these feeder calf traits if incorporated in the marketing plan.

Beef program specialists from the Iowa Beef Center also conducted interviews with ten Iowa auction market representatives throughout the state—exploring management approaches that enhance the value of calves sold through the auction market system. The interview sessions focused on three practice areas—health, management, and marketing of the calf crop. The results of the top three responses for each of the practice areas are listed in the PowerPoint slides. In summary, the IBC Auction Market Survey responses reflected the importance of having a solid health program resulting in calves that have a healthy appearance. In the management area, superior genetics are extremely important and the “key” to adding value to the calf crop. Other considerations included delivering calves in proper body condition and having calves weaned thirty or more days. From the marketing side, the interview reflected that marketing at special feeder sales was the top choice for adding value—with developing a positive herd reputation and timing of marketing the calf crop being the second and third marketing practice choices.

The presentation also discusses PVP and QSA programs and their benefits. As a supplement to the brief information about these programs highlighted in the PowerPoint slides, the Appendix includes several resources on third-party verification programs.

Increasing the Value of Feeder Calves with Sensible Health Practices

Dr. Grant Dewell, Extension Veterinarian
Iowa State University

INTRODUCTION

Health management can be a critical component to adding value to your calves. Whether you are selling your calves at weaning, selling after pre-conditioning or backgrounding, or retaining ownership of your calves through the feeding phase, a health management program is important. The biggest increase in value for your operation is having more calves alive at the end of your production phase.

PRE-NATAL NUTRITION

There have been several studies in the last ten years that have shown the benefits of good colostrum immunity. Such immunity not only improves the health of neo-natal calves – it can have an impact all the way through the feeding period. Sufficient pre-partum nutrition is important for calves to achieve adequate passive transfer of immunoglobins after birth. In order for cows to produce quality colostrum they need sufficient protein and energy during the last thirty days of gestation when colostrum is beginning to be made. Additionally, sufficient nutrition pre-partum is important for the calf also. Proper energy and protein levels are vital for calf vigor after calving. Calves from energy- or protein-restricted dams during gestation have decreased calf vigor and ability to generate body heat. Weak calves will be less likely to intake adequate amounts of colostrum and are more prone to increased morbidity and mortality. Ideally, cows should calve at a BCS of 5 (heifers at BCS 6). Up to 80% of fetal growth occurs in the last 50 days of gestation. Females during this period of gestation need approximately 11 Mcal of energy and 1.7 lb of crude protein per day.

HEALTH DURING LABOR

Once the cows have sufficient nutrition to get them through calving, the next priority is getting a live calf on the ground. Dystocia increases the risk of neonatal calf death by four times. Proper observation of females during the calving season can identify dystocia to allow for timely intervention. Ideally, females should be observed every two hours. A recent USDA NAHMS report (<http://nahms.aphis.usda.gov/beefcowcalf/index.htm>) noted that only 50% of producers observe females more than twice a day and less than 15% observe more than four times a day. With proper observation, females with dystocia problems can be identified in time to increase the likelihood of obtaining a live calf.

Knowing the stages of labor and identifying when a female is in each stage can help indicate when assistance is needed. Stage 1 of labor begins with the initial contraction of the uterus and ends with the dilation of the cervix. Stage 1 labor usually only last two to six hours. Failure of a female to move out of Stage 1 labor indicates that the calf may not be positioned properly to cause proper dilation of the cervix. Assistance should be given if Stage 1 lasts more than eight hours. During Stage 1, cows will usually be restless and seek isolation for a place to calve.

Stage 2 of labor begins when the cervix is dilated and the calf has entered the birth canal and ends with the expulsion of the calf. Stage 2 is characterized by abdominal contractions, and the water bag and calf will usually be visible. Dystocia during this timeframe can be critical as the cow will quickly become tired and the calf can be traumatized due to repetitive contractions and potentially excessive pulling. Assistance should be given during Stage 2 if the water bag has been visible for two hours and the cow is not pushing, the cow has been in active labor for thirty to sixty minutes without progress, the cow is tired or the calf appears stressed, or if an abnormal presentation is identified. To increase the chance of a live calf you should seek veterinary assistance if you do not understand what you are feeling or you have been pulling for thirty minutes without progress. When pulling calves do not use more than 500 lb of force (equivalent to the pulling of two strong men) to decrease trauma to the calf.

POST-NATAL NUTRITION

Once a calf is born alive they must intake colostrum for an adequate immune function. Dystocia calves should be administered colostrum via a bottle or esophageal tube instead of relying on them to stand and nurse. Beef calves that do not have adequate colostrum intake and absorption may be nine times as likely to become ill in the pre-weaning period than calves that had received and absorbed enough colostrum. As usual, protect newborn calves from extreme environmental conditions when necessary.

Once the calf is born, implementing strategies to minimize calf death is important. Historically, calving dates were pushed back earlier in the year so that calves would weigh more in the fall at weaning. However, calving earlier in the year (before April 1) when adverse weather can be a problem increases the risk for calf death loss. It is difficult to make up the value of a dead calf by increasing weight gain in the surviving calves. Another risk factor

of calf death loss is calving more heifers. Heifers have increased dystocia problems, inferior colostrum quality, and have the potential to be poor mothers. Management programs that optimize reproduction and longevity of the cow herd will help decrease the replacement rate. The calving area should be maintained to prevent death loss in the post-natal period. Calving areas should be well drained to decrease mud and have adequate shelter for the animals; the density of animals should not overwhelm the capacity of the calving area. Decreasing the length of the calving season can increase the value of the calves by having a more uniform marketing group, but it can also help decrease death loss. Long calving seasons increase death loss by increasing the contamination in calving areas, particularly toward the end of the calving season. Calves at the end of the calving season are not only exposed to more pathogens, but since they are younger they do not have the capability of dealing with all the pathogens that older calves are shedding.

Implementing a calving pasture rotation such as the “Sandhills Calving System” can help prevent calf death loss due to disease. In this system all cows that have not calved are moved to a new pasture every seven to fourteen days and the cow-calf pairs are left behind. This allows for later calves to be born in a clean calving pasture. Stubble fields can be utilized if grass pasture is not available.

HEALTH IN OLDER CALVES

Once calves have made it through the post-natal period, don't forget your calves out on pasture. Pinkeye is a continual problem for young calves on pasture. These animals do not have a mature immune system, so they are more susceptible to acquiring a pinkeye infection. Calves should be identified and treated early to prevent large scars or blindness. Not only do calves with pinkeye not gain as much (approximately 20 lb per case) but calves with eye lesions at sale will usually be discriminated against and bring less. Unfortunately, vaccination is not very effective, so fly and dust control and pasture management are critical to help prevent the occurrence of pinkeye.

Summer pneumonia seems to be a growing problem for Iowa producers. Bovine Respiratory Syncytial Virus is a common virus associated with this problem as well as numerous bacteria. However, because their immune system is not mature, vaccination of calves with a viral vaccine in the spring has not been beneficial in reducing summer pneumonia. Similar to calf scours, increased concentration of cattle enhances the transmission of pathogens be-

tween calves. We do not usually think of calves on pasture being concentrated but as pasture resources have decreased, the density of animals on pasture has increased. Additionally, a long calving season also contributes to summer pneumonia. As with calf scours multiple aged calves mixed in one group can be detrimental to individuals that do not have an established immune system. Identifying and treating these calves early will help decrease mortality and longer term morbidity and production losses from calves that have compromised lungs.

Immunity and immune function is critical to produce a healthy calf at weaning. Proper attention to mature cow health programs and nutrition is the foundation for quality calves. Good management practices during calving (dystocia and colostrum) and the post-natal period assures that the calf will have a proper start in life. Once the calf's immune system is capable of mounting an appropriate immune response, vaccinations can be used to enhance the calf's ability to survive the next production phase.

PRECONDITIONING PROGRAMS FOR CALVES

The Iowa Green Tag program is a hallmark preconditioning program. Ideally calves should be vaccinated prior to weaning to decrease respiratory disease problems during the stressful weaning period. These calves can then be re-vaccinated, and if weaned for over 45 days would qualify as Gold Tagged calves. For producers who do not retain ownership, a pre-conditioning program is a reliable method to add value to their calves. Producers should seek sales that fit their production system and that highlight quality preconditioned calves available.

Iowa Green Tag Program

- Calves must be castrated and de-horned
- Veterinarian administers required vaccines (IBR, BVD, BRSV, PI3, Clostridia and *H. somnus*)
- Veterinarian treats for internal and external parasites
- Calves weaned for 30 days

Iowa Gold Tag Program

- Calves must be castrated and de-horned
- Veterinarian administers required vaccines (IBR, BVD, BRSV, PI3, Clostridia and *H. somnus*)
- Veterinarian treats for internal and external parasites
- Veterinarian re-vaccinates calves (IBR, BVD, BRSV, PI3, Clostridia and *H. somnus*)
- Calves weaned/backgrounded for 45 days

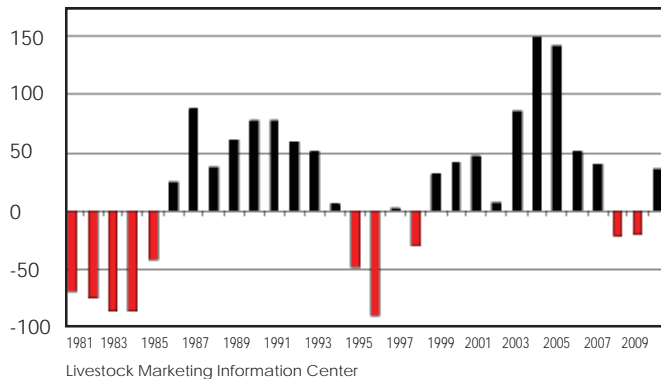
Capturing the Potential Value of Feeder Calves

Daryl Strohbehn, Extension Beef Specialist
Iowa State University

INTRODUCTION

Marketing the calf crop to its full potential is an absolute must in today's economic climate. Profitability as shown by the Livestock Marketing Information Center (Chart 1) has always been a rocky road, but with costs increasing at an unprecedented rate in the past three years, profitability is a real challenge. Due to this challenge, pressure has mounted to practice even more sound marketing principles. While individual producers cannot control average market prices, they certainly can control some of the price variation at market outlets where their feeder calves could be received. Developing a strategy that will increase the odds of receiving price premiums is doable by all managers.

Chart 1: Estimated average cow calf returns
Returns over cash cost (includes pasture rent), annual



FACTORS IMPACTING PROFIT

Making a profit in the cow-calf business has been shown many times to lie in cost control. In fact, an analysis by Iowa State University and the University of Illinois showed that 82% of the variation in return to labor and management were dependent upon cost control, with feed cost being the most important one (Table 1). However, most of the revenue estimates for that data set were based on end of year inventory value with most cooperators marketing after the year's end; the impact of actual calf market price was lost in the analysis. In research done at South Dakota State, Dr. Barry Dunn analyzed 148 herds for factors impacting profit and found that gross revenue generation had a significant impact

Table 1. Summary of factors impacting profit in Iowa/Illinois

Variable impacting profit	R2 - Degree of impact on profit
Feed cost	.567
Depreciation cost	.086
Operating cost	.049
Calf weight	.046
Capital charge	.024
Calf price	.027
Weaning percentage	.017
Herd size	.007
Total	.823

SPA Herd Summary, A. Miller, U of Illinois.

on profitability. Included in revenue generation in the South Dakota study was the variation in market price received. As shown in Table 2, there were large differences between market revenue and prices received between the profit groups with the high profit 1/3 group achieving over \$14/cwt more for their calf crop. Thus, revenue generation through better marketing principles is an important aspect to total herd management.

HERD REPRODUCTION

Revenue from the calf crop begins with successful reproductive rates. The national average for calving percentage is 92% according to the NAHMS report issued in 2008, but actual calf crop weaned is in the 85% area; unfortunately, being average in reproductive rates does not bode well for generating revenue. Successful reproduction, however, does not lie simply with pregnancy, calving, and weaning rates. Tighter calving seasons is an important factor in cow herd revenue generation. A high percentage of calves born in the first 30 to 45 days of the calving season can translate to a uniform calf crop and makes nutritional and health management easier. Additionally, when presenting the calves at the marketplace one will have fewer sorts and this leads to fewer price discounts.

Table 2. SPA measurements for Low, Medium and High Profit Herds

	Low Profit 1/3	Medium Profit 1/3	High Profit 1/3
Lbs. weaned/cow exposed	413	455	455
Total income per beginning year breeding female	\$390.75	\$423.08	\$495.35
Total cost/beginning year breeding female	\$637.68	\$386.87	\$270.23
Net income/beginning year breeding female	-\$247.02	\$36.29	\$225.13

Dunn, 2000

FACTORS DRIVING CALF PRICES

There are many factors influencing price received at the marketplace. Without question the quality of the calf crop and the genetics behind them have a great deal to do with market price. This is rightfully so because there are large differences in how calves generate revenue when placed in the feeding sector. In a recent unpublished set of data (see Table 3) from the Tri-County Steer Carcass Futurity by Darrell Busby, ISU Extension Beef Specialist, it was found that the high 1/3 profit steers were worth \$21.50/cwt more than the low 1/3 profit steers as feeder calves. Part of that was due to health differences, but a major portion of that was due to \$140 difference in gross carcass revenue; those carcass revenue differences were due to genetics for growth and carcass merit including higher quality and yield grade percentages.

Visual traits that influence quality and market price include breed, color, body condition, frame size, muscularity, and, of course, sex of the calf. Heifers on most occasions will be discounted to steers by \$6 to \$10/cwt. Castration of bulls and having them healed by market time is imperative to avoiding discounts. The same holds true for dehorning. In a 2006 auction market survey conducted by the Iowa Beef Center (IBC) involving over 20,000 lots of feeder calves, bulls were discounted to steers \$6.20/cwt. Not dehorning the calves ended in a discount of \$1.70/cwt. Castrating and dehorning as early in the nursing period as possible reduces stress, maintains the

surgical sites in a cleaner environment, allows ample time for healing, and gives one time to make up for the performance decrease with a low-dose type implant program.

Body condition can impact price received. The same IBC survey found that fleshy calves were discounted \$2.41/cwt. As one manages both the creep feeding and post-weaning feeding programs, it is imperative to not get over anxious and push calves too hard. Most herd genetics today allow for daily gains in the 2.25 to 2.75 range without undue amounts of flesh development. On a 1-9 body condition scoring system producers should try to have the preponderance of calves in the 5-6 score area. Yes, thinner calves in the 3-5 area might bring a higher market price per hundred weight, but they will weigh less, have higher costs of gain and not return as many dollars to management. Are there exceptions to this guideline and rule? Yes, but recent history would suggest body condition scores of 5-6 will be the correct decision most of the time.

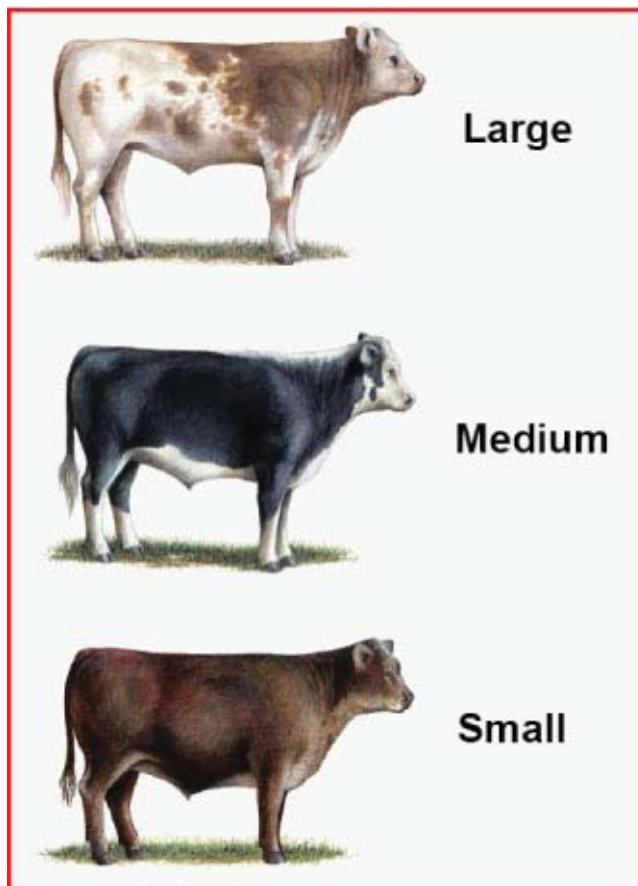
In Iowa it is a rarity to find calves discounted due to frame and muscle score. Calves medium in frame score will most likely finish with .4 to .5 inches of fat cover in the 1100 to 1250 lb range depending upon implant strategy utilized. Large frame calves will typically range in finished weight from 1250 to 1450 lbs, again depending on implant strategy used. In auction market surveys conducted in Arkansas and Oklahoma, small-frame feeder cattle were discounted to

Table 3. 2008-09 Profit Comparison of 5,828 steers from Tri-County Steer Carcass Futurity

	High 1/3	Low 1/3	Average
Delivery weight	713	718	710
Final weight	1257	1225	1236
ADG	3.51	3.27	3.39
% Treated for sickness	10%	29%	19%
Hot carcass weight	778	751	760
% Yield Grade 1 & 2	65%	55%	59%
% Choice & Prime	72%	48%	61%
Total carcass value	\$1134	\$994	\$1067
Feed cost / cwt gain	\$59.04	\$66.71	\$62.26
Total cost / cwt gain	\$75.52	\$88.11	\$80.79
Profit	\$99.21	-\$154.00	-\$15.96
Breakeven feeder calf value, \$/cwt	\$99.93	\$78.43	\$90.05

Busby

Figure 1. USDA Frame Scores



Expected Weight to Grade
Choice for USDA Frame Score

Frame Score	Steers	Heifers
Large	1250 lbs & up	1150 lbs & up
Medium	1100 – 1250 lbs	1000 – 1150 lbs
Small	Under 1100 lbs	Under 1000 lbs

Figure 2. USDA Muscle Scores



large-frame feeders by \$18 to \$19/cwt and large-frame feeders outsold medium-frame feeders by \$1 to \$4/cwt.

Muscling can impact feeder prices also, but in Iowa most calves are typically moderately thick in muscling with a few slightly thick that do not get sorted out. Yes, occasionally dairy cross cattle are presented with thin muscle scores and they will be discounted due to muscle. The Arkansas research showed that moderately thick to thick muscled calves received a \$4.72 premium over slightly thick and thin muscled calves. The moral to this story is to be sure to select

breeding cattle that produce calves with adequate muscling.

Whether one likes it or not breed and color do influence market price in today's marketplace. Black hided calves are selling at higher prices due to premiums, which cattle feeders can potentially receive when they market the finished product. Although feeders are assuming many of the black hides are Angus influenced, there is no doubt that some of the genetics purchased are black hided due to many homozygous black bulls of different breeds. This is a positive today because commercial cow-calf producers can take better

advantage of crossbreeding to design genetic packages that fit their operations. Several surveys have been done in recent years that look at price differences due to hide color. In the IBC survey black and black mixed feeder groups received a \$3.06/cwt premium over non-black hidéd feeders.

NEW FACTORS ALTERING CALF VALUES

Certainly all producers are aware that international and national cattle disease events have dramatically altered the production and market environment. Especially due to BSE, strict requirements have been laid at the doorstep of the sector that harvests and prepares our end product for human consumption. Age restrictions to market end product to the Pacific Rim have been invoked (not greater than 20 months) and now those age restrictions have been passed down the production chain to the feedlot and feeder calf producers. Due to this an opportunity for producers willing to keep the age and source records has emerged, allowing them to provide cattle that will fit into these marketing systems. However, to do this cow-calf producers must age verify their calves to capture any premiums associated with this export market.

In a recent paper, Dr. Scott Greiner at VPI summarized verification programs and their role in this brief manner.

[The] USDA has established two processes by which cattle birth records may be tracked through the production chain. In general, PVP programs are designed to verify cattle prior to marketing (applicable to feeder cattle sales); whereas, QSA programs define mechanism by which records are maintained and transferred within a production system (retained ownership with a known feedyard and packer).

There are several PVP programs which have been approved through USDA. Examples include those administered by beef processors (Smithfield Beef Group, PM Beef Group, Creekstone Farms), information management companies (ITS, AgInfoLink, IMI Global, etc), and breed associations (AngusSource, Red Angus Association).

Quality System Assessment Programs are similar to PVP programs in many ways, although a QSA generally involves certification of a system that may involve several entities. These companies or groups have certified through USDA a system of records and procedures that can verify their claims

to specific attributes of their product. For source and age verification, most beef processors have an approved QSA for exporting beef. This QSA describes how age/source will be documented by the packer with cooperation from source feedlots and their producer suppliers (cow-calf producers). (2007)

To participate in these programs requires the following basic record requirements for the cow-calf producer:

1. Herd identify all cows and calves at birth with a unique number
2. Keep a calving record with calf and cow ID, calving date, and calf sex. Minimum record would be dates the first and last calves were born. Keep records in a safe, accessible place for three to five years.
3. Be able to differentiate between home-raised and purchased cattle.
4. Keep cattle inventories, movements, retagging and sales.
5. Keep BQA records up to date as required and record all vaccinations, deworming, implanting and health treatments.

Typically most PVP programs will require completion of a training program and completing some necessary forms which describe how you do your record keeping, identify your cattle, document your birth dates, etc. This information is then passed on to the PVP program manager so it is accessible to whoever purchases your cattle. To date many PVP qualified cattle carry premiums of \$25 to \$45 per head at harvest which of course goes to the cattle finisher. However, because of these premiums, cattle feeders are willing to bid a premium into the feeders upon purchasing them. But it is up to the cow-calf producer to align their production with marketing opportunities to achieve a premium above base market value.

SUMMARY

There is no guarantee that if one implements all of the marketing strategies mentioned that a premium price will be achieved, but the likelihood is certainly better. Be certain to produce quality calves that are in demand, implement a sound health management system that is recognized in your area and take your calves to market in clean and appropriate body condition.

Backgrounding Systems – Adding Value, Adding Pounds

Dr. Dan Loy, Extension Beef Specialist
Iowa State University

INTRODUCTION

Is there a management strategy that will add \$200 per head to your calves? The answer is yes, and there is probably only one. That strategy involves owning the calves longer and adding value through adding pounds in a backgrounding program. Is this too good to be true? Possibly. You will likely lose bragging rights for selling your calves for the highest price per pound. There is also the very real possibility that adding \$200 per head to the value of your calves will cost \$210, or even \$250. A winning backgrounding strategy requires a combination of the right opportunity (markets and timing) with the right resources (feed, cattle, and management).

KNOW YOUR MARKETS

Assessing the opportunity. The companion paper, “Calf Marketing Strategies” (on page 17), written by Shane Ellis, Iowa State University livestock economist, gives some general guidelines and typical budgets using current projected prices for backgrounding calves at thirty, sixty, or ninety days. An analysis like this can help assess whether the retained ownership option is one that should be considered, or if it is in the best interest of the producer to “take the money and run.” Of course prices and costs are always changing, and they differ by region and the individual producer’s situation. When budgeting projected backgrounding strategies, one very helpful tool is the Web site www.beefbasis.com. This site calculates expected feeder prices based on the cattle description, location, and futures prices for cattle and corn. Once the decision is made that there may be an opportunity for backgrounding, then the next step is to define the goals for the backgrounding enterprise and fine tune the rations and system used.

Goals (ownership or adding value). Most often the goal of backgrounding is to add value to the entire calf crop. This, of course, involves adding value (pounds) at a cost less than the value of the animals sold. However, there may be times when backgrounding is more a matter of ownership. This may be pure speculation that cattle markets may rise and the value of calves will increase. More extensive backgrounding systems have some element of the “ownership” goal. Systems where calves are wintered on a low cost, low gain system prior to summer grazing would be an example. Producers with long calving seasons may utilize this system to add value to the

later-born, lightweight calves. This may also be an option for fall-calving herds or for operations with excess grass for the cow herd.

KNOW YOUR CATTLE

Genetics. Post-weaning performance may be more of an unknown in herds that have had a selection emphasis on reproduction, maternal traits, and weaning weights. Herds that have been selected for post-weaning growth utilize a high growth breed sire may be more responsive to adding additional pounds post weaning. Also herds with a large cow size may find the additional pounds added to the calves beneficial as a way to offset the additional cow costs. Backgrounding, coupled with early weaning may relieve some of the nutritional stress on larger frame cows.

KNOW YOUR FEED SUPPLY

A successful backgrounding program requires a competitively priced feeding program. It is recommended to take a complete inventory of available feeds, both raised and purchased. Some raised feeds may not have other markets, such as silages. One tool that is available to begin the process of feed selection is the “Energy Indexing Software,” available as free shareware from the Iowa Beef Center. This program can be downloaded at the following address:

<http://www.iowabeefcenter.org/content/software/Feed%20Energy%20Index%20NE.xls>

This program is not a ration balancing program, but can help pre-screen potential feeds that may fit into a feeding program. Figure 1 shows the sample output from this program.

Make your cattle locavores. When looking at potential feeds for a backgrounding enterprise, often those feeds closest to home offer the best opportunities. Look first at home-raised feeds that have limited markets outside of on-farm use. Next, consider similar feeds that may be available for purchase from neighbors, or byproduct feeds that are available locally. Not every producer is five miles from an ethanol plant, but many may have access to a local seed corn plant producing forage refuge, grain screenings available from the local elevator, a microbrewery producing wet brewer’s grains, or a food processor. After considering the feeds next door, then

Figure 1. Feed Energy Index output sheet.



Producer: _____

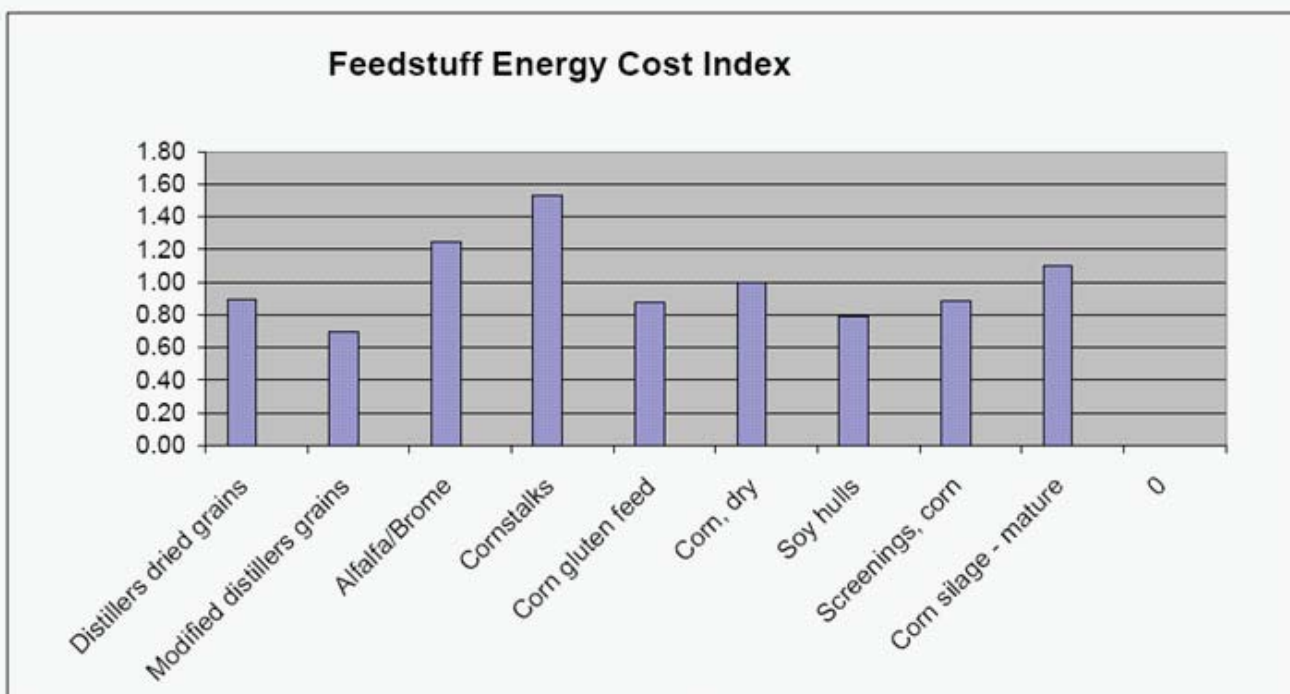
Feed Energy Index

Consultant: _____

Ration formulated for: 1 = cows, 2 = feedlot cattle, 3 = replacement cattle

Feeds to Rank	Dry Matter %	Mcal / lb Dry Matter		\$ / ton (as fed)	Est. Waste
		NE m	NE g		
1 Distillers dried grains	90.00	1.00	0.65	\$120.00	2%
2 Modified distillers grains	50.00	1.00	0.69	\$50.00	8%
3 Alfalfa/Brome	85.00	0.58	0.32	\$75.00	12%
4 Cornstalks	80.00	0.45	0.21	\$60.00	15%
5 Corn gluten feed	90.00	0.92	0.62	\$110.00	2%
6 Corn, dry	85.00	1.00	0.70	\$132.00	2%
7 Soy hulls	91.00	0.84	0.55	\$90.00	2%
8 Screenings, corn	85.00	0.95	0.65	\$110.00	2%
9 Corn silage - mature	40.00	0.74	0.47	\$40.00	18%
10					

Cost Index	Rank
0.89	5
0.69	1
1.24	8
1.53	9
0.87	3
1.00	6
0.79	2
0.89	4
1.10	7



* a feedstuff with both a cost index and a handling index below "1.00" would generally be the most preferred feed option.

look at opportunities in the region. Virtually every farm in Iowa is within thirty to ninety miles from an ethanol plant. Even with the transportation costs, high-moisture corn co-products can be a good value. Watch for seasonal pricing opportunities and consider long-term storage methods to preserve feed quality. Finally, evaluate local pricing opportunities for commodity feeds like distillers dried grains, corn gluten feed, soy hulls or wheat midds.

KNOW YOUR FACILITIES

One important consideration for backgrounding calves is the facilities. The facilities should consist of clean, well drained lots. The calves should have 18-24 in of bunk space at weaning so every calf can eat. While enough pen space for comfort is important, newly weaned calves may walk the fences in a 40 ac field. Efficient handling facilities should be available for pulling and treating sick calves with the least amount of stress. In hot weather, shade and dust control should be considered. In cold or wet weather shelter or bedding may be needed.

KNOW YOUR MANAGEMENT

Implants. The most important implant is the one used during the last eighty to 100 days of ownership. For backgrounded cattle an implant at this time will add 10% to 12% to the growth rate of the calves and improve feed efficiency by 7-10%. A moderate dose estrogen-based implant or a low dose combination implant would be good choices for backgrounding calves. Consult with your veterinarian or nutritionist on the best implant system.

Health management. The time of weaning and the month that follows can be the most stressful time for a beef calf. During this time period, calves are more susceptible to respiratory disease and pneumonia. For some operations, coccidiosis can be an issue at this time. It is very important to consult with your veterinarian and have a vaccination program in place. Vaccinations may be necessary prior to weaning so it is important to have this consultation early, prior to weaning. Also discuss the proper treatment protocol and be prepared to respond if the calves need to be treated.

Feed additives. Even if you are feeding a high protein byproduct feed, some type of supplement will need to be fed. For traditional feeds, like corn and hay, this supplement will often be a 32% to 36% protein supplement. For higher protein rations the supplement will likely be a mineral balancer that consists of sources of calcium, salt, trace minerals, vitamins, and feed additives. The feed additives are often ionophores. Ionophores are antibiotics that are not absorbed by the animal but are active on certain rumen bacteria. The result of feeding ionophores is an improvement in feed efficiency, usually around 5% to 8% for rations typical of a backgrounding program.

Bunk management. Bunk management relates to feed mixing and deliveries. A good bunk management program should have the goal to maximize feed intake and minimize waste and spoilage. Also the feed should be delivered in a way that every calf receives the same nutrients. Systems where feeds are fed separately make feedbunk management much more difficult. Wagner et al. (1988) conducted a study where a total mixed ration (TMR) using a mixer wagon was compared to feeding a low management system where

Table 1. Performance of heifers fed either mixed or unmixed diets

	Mixed	Unmixed
Initial weight	476	474
ADG	1.82	1.65
DMI	16.59	17.05
Feed/gain	9.12	10.38

Wagner et al (1988)

the feed quantities were estimated by loader buckets. The results are shown in Table 1. He calculated that 100 head fed for 145 days would pay for the TMR wagon. That was in 1988 dollars.

PUT IT ALL TOGETHER

Rations. One of the key decisions is the energy level fed to the calves and the target rate of gain. Unless there is access to an extremely low cost forage or byproduct, typically the faster the rate of gain the lower the cost of gain. The rations used in the systems compared in the companion paper were designed to produce a daily gain of 2.0 to 2.2 pounds per day. This is a faster rate of gain than what might be typical in some situations. For example, Table 2 shows the 10-year average (1996-2005) from the Carrington North Dakota Farm Business Management Program.

Table 2. 10-year average of Backgrounding programs, Carrington, North Dakota

Item	10-year average
Average in wt.	541
Average in value	\$470.18 (\$86.91/cwt)
ADG	1.83
Average out wt.	722
Average out value	\$570.02 (\$78.99/cwt)
Feed/gain	10.91
Feed cost per head	\$55.70
Total cost per head	\$78.84
Net return per head	\$21

Metzger (2006)

Feed conversion was noted to be a limitation to profitability in the North Dakota data. Several factors affect feed conversion, but the energy level fed is the largest effect. Limitations to increasing energy level include the fear that calves will become too fleshy and command a lower price and the challenges of backgrounding calves for sale along with replacement heifers for the cow-calf herd. To assess the effects of changes in energy levels, Table 3 shows the performance effects of changing ration energy levels. These adjustments were conducted with the aid of the ISU Beef Ration and Nutritional Decisions Software (BRaNDS). The moderate energy ration is consistent with the corn-hay, 90-day diet used in the budgets generated by Ellis (page 17). Average daily gain, feed efficiency and cost of gain are all directly related to the level of energy fed.

Table 3. Ration performance of backgrounding rations that differ in energy level

Item	Low Energy	Moderate Energy	High Energy
Pounds grain/day	4.5	7.5	11
Percent concentrate	25%	40%	60%
Ration NEg (Mcal/cwt)	37	43	51
ADG	1.5	2.2	2.7
Feed/gain (DM)	10	7.5	5.8
Cost of gain	\$.82	\$.66	\$.48

a: Assumes corn (\$4/bu)- hay (\$75/t) ration

Does the difference in cost of gain offset the discounts for fleshy calves? With the 2009 prices assumed in Table 3, the value difference is approximately \$35 per head between the moderate and high energy groups, assuming both groups are marketed at 750 lb. Table 4 shows the effects of fleshy calves on feeder prices in three recent auction market surveys. These data are highly variable depending on time and location. Producers should consider the genetics of their calves also, and their ability to grow at higher rates of gain and still maintain average or lower body condition. If a higher rate of gain is desired, cow-calf producers should consider sorting steers from replacement heifers so the steers can be fed harder.

Table 4. Discounts for Average vs Fleshy Calves

Discount*	Data source	Reference
-\$2.41/cwt	Iowa, 2005-2006	Balut et. al (2006)
-\$1.78/cwt	Oklahoma, 2001-2003	Ward et. al.
-\$5.86/cwt	Arkansas, 2005	Troxel et. al.

*per cwt for fleshy vs. average calves

Systems. The systems described thus far in this paper have been relatively traditional: cattle are fed a forage-based diet with enough added energy in the form of grains or byproducts to gain 1.5 to 2.5 lb per day, and they are fed for a period lasting from thirty to 100 days. There may be situations where an alternative system may be considered.

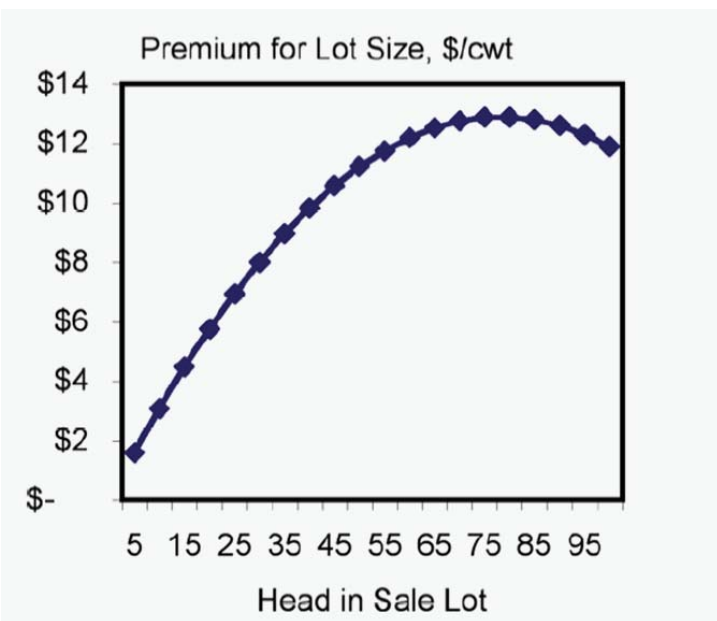
Two alternative systems are limited intake backgrounding and extended backgrounding. Limited intake, or programmed feeding, is a common system of backgrounding in Western feedlots where roughage costs prohibit a cost effective, traditional backgrounding program. In this case a higher energy diet, typically 70% to 80% concentrates or 55-58 Mcal NEg/cwt DM, is fed at a restricted rate determined by the net energy system and ration development software. Restriction of 70% to 85% is not uncommon, depending on the energy level of the ration, to produce a daily gain of 2.0-2.2 lb per day.

Another system that may be viable under certain conditions is an extended backgrounding program. Extended backgrounding works best when the producer has an abundance of low cost forage available such as pasture or crop residues, and/or has reason to believe that a marketing advantage can be obtained by owning cattle a longer period of time. In this case a general rise in the

cattle market is expected and interest rates are not prohibitive. An example of an extended backgrounding program followed by finishing is shown in a recent University of Nebraska study (Table 5). These systems were developed for June-born calves in Western Nebraska. The extended systems in this study were backgrounded for 267 days.

Networking. One final consideration when backgrounding your calves is the power numbers. Pooling your calves, or purchasing additional calves to increase the lot size can be a significant opportunity, especially for the smaller producer. Shown in Figure 2 is the change in cattle value based on lot size from the 2005-6 Iowa feeder auction surveys. Premiums of \$5-10 per cwt are not uncommon if the result is a truck load lot.

Figure 2. Feeder cattle premium by lot size, 2005-6 Iowa data (Bulut et al, 2006)



SUMMARY

Backgrounding calves can be a successful and profitable decision if a little homework is done ahead of time. Knowledge of the markets, the cattle and their potential, the feed supply available and facilities available is a necessary piece of homework. Then if the stars align a system that includes the feeding program and market-

Table 5. Performance by phase and carcass data of June-born calves

	<i>Treatments</i>			
	Low ADG wintering		High ADG wintering	
	<i>Short Pasture</i> 100 d	<i>Long Pasture</i> 159 d	<i>Short Pasture</i> 100 d	<i>Long Pasture</i> 159 d
Background Phase				
Initial wt.	426	426	427	435
ADG	1.39	1.51	2.36	2.44
DMI	10.3	10.5	14.4	14.8
Feed/Gain	7.4	7.0	6.1	6.1
Days fed	108	108	108	108
Range Phase				
Initial wt.	576	590	681	700
ADG	1.44	1.46	0.98	1.06
Days fed	100	100	100	100
Meadow Phase				
Initial wt.	--	734	--	805
ADG	--	0.83	--	0.76
Days fed	--	59	--	59
Finishing Phase				
Initial wt.	712	785	781	851
ADG	3.42	3.98	3.44	4.19
DMI	23.2	26.7	24.3	27.0
Feed/Gain	6.8	6.7	7.1	6.4
Days fed	140	119	140	119
Carcass data				
HCW	746	792	790	849
Fat Thickness	.47	.50	.54	.53
YG	2.7	2.8	2.9	2.8
Marbling score	598	620	613	624

ing plan can be planned.

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Calf Marketing and Backgrounding in Fall 2010

Shane Ellis, Extension Livestock Economist
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INTRODUCTION

The first step in a marketing plan is to determine the cost of producing the cattle to be sold. Divide the total cost over the number of animals that will be sold to establish a break-even benchmark. While the marketing objective may be to maximize selling price, establishing a breakeven price will create a starting point. The second step in the plan is to assess the amount the risk tolerance of both the operation and the cattle owner. If the financial position of the operation is less than stable or the cattle owner is fearful of a downturn in the market before the cattle are sold some steps for risk management should be taken. Choosing the best method for managing market risk will depend on the size of the operation and number of marketing venues available.

While the simplest marketing plan may be to deliver cattle at the local cattle auction and take what ever the market will offer that day, it also leaves the producer in the position of a “price taker” with little say in the price negotiation. This is not to say a traditional auction marketing strategy is not good, because if the market is improving, an auction could deliver the best selling price. But this is not the case every season. Proactive marketers will not only follow the market trends well in advance of the expected sale time, but also take steps to add value to the cattle and establish price guarantees when the market reaches a perceivable apex.

FORWARD PRICING

Forward pricing cattle can be done in a variety of methods, with perhaps the simplest method being a forward contract. If cattle prices are predicted to be higher when the cattle will be marketed, try to establish some guarantees that will ensure that price will still be there when the cattle are ready. Forward contracts and futures market hedges will lock in a price and are the best protection from decline in the market. If only a

price floor is desired with the opportunity to profit from a market upturn then purchasing a futures put option or feeder cattle price insurance from an ag insurance agent may be the best choice.

Feeder cattle preconditioning and other value added programs can improve market price. Third party preconditioning programs such as the Iowa green tag and gold tag programs have been shown to improve the price of cattle sold at auction: <http://www.iowabeefcenter.org/content/IBC30.pdf>

BACKGROUNDING CALVES

If the cattle market is expected to improve after the calves are weaned a producer may consider retaining the calves and backgrounding them for a period of time. Evaluate the cost effectiveness of backgrounding by adding the cost of holding the calves to their market value at the initially intended time of sale. If this amount is less then the expected market value at a future time then backgrounding may be a viable option. If things don't add up to be profitable on paper, they probably will not in the real world.

With the cheaper feed commodities many producers may have an opportunity to improve profitability by backgrounding calves. The following budgets (see page 18) illustrate the impact on net returns if ownership in a calf is retained during a thirty, sixty, and ninety day back grounding period beginning in Mid-September 2010. In addition to the added value of the calf there may be some market timing advantages to holding the calves longer. If fed cattle remain steady to stronger and/or corn prices become softer on increased supply there will be potential for increasing feeder cattle prices. Assuming that corn will cost \$3.85/bu for the backgrounding period these budgets indicate the potential for increased profits. Keep in mind that adding a backgrounding enterprise increases both risk and cost along with potential profitability.

Budget 1. Corn and Hay Ration, Price forecasted based on Futures, Jan 2010

	30 Day			60 Day			90 Day		
	Qty.	Unit	Value	Qty.	Unit	Value	Qty.	Unit	Value
Calf Value @ \$1.14/lbs	550	lbs	\$627.00	550	lbs	\$627.00	550	lbs	\$627.00
Yardage cost @ \$0.35/day	30	days	10.50	60	days	21.00	90	days	31.50
Corn @ \$3.85/bu	3.91	bu	15.05	8.24	bu	31.72	13.14	bu	50.59
	219	lbs		461	lbs		736	lbs	
Hay @ \$ 75/ton	0.155	tons	11.63	0.326	tons	24.45	0.54	tons	40.50
	310	lbs		652	lbs		1080	lbs	
Mineral @ \$0.16/lb	10	lbs	1.60	20	lbs	3.20	30	lbs	4.80
Operating interest @ 7%			1.94			2.06			2.20
Deathloss	0.5%		3.14	0.6%		3.76	0.7%		4.39
Misc.			5.00			10.00			15.00
Total Cost			\$675.86			\$723.20			\$775.98
Breakeven			\$1.10			\$1.06			\$1.03
Backgrounded Calf @ projected value \$/lb	616	lbs	\$671.44	683	lbs	\$737.64	750	lbs	\$780.00
	\$ 1.09			\$ 1.08			\$ 1.04		
Net			(\$4.42)			\$14.44			\$4.02

Budget 2: Corn, Stalks and Modified Distiller Ration

	30 Day			60 Day			90 Day		
	Qty.	Unit	Value	Qty.	Unit	Value	Qty.	Unit	Value
Calf Value @ \$1.12/lbs	550	lbs	\$627.00	550	lbs	\$627.00	550	lbs	\$627.00
Yardage cost @ \$0.35/day	30	days	10.50	60	days	21.00	90	days	31.50
Corn @ \$3.85/bu	2.74	bu	10.55	5.77	bu	22.21	9.2	bu	35.42
	153.44	lbs		323.12	lbs		515.2	lbs	
MWDG @ \$45/ton	0.141	ton	6.35	0.296	ton	13.32	0.473	ton	21.29
	282	lbs		592	lbs		946	lbs	
Stalks @ \$65/ton	0.099	ton	6.44	0.208	ton	13.52	0.331	ton	21.52
	198	lbs		416	lbs		662	lbs	
Mineral @ \$0.16/lb	10	lbs	1.60	20	lbs	3.20	30	lbs	4.80
Operating interest @ 7%			0.10			0.21			0.33
Deathloss	0.5%		3.14	0.6%		3.76	0.7%		4.39
Misc.			5.00			10.00			15.00
Total Cost			\$670.67			\$714.23			\$761.24
Breakeven			\$1.09			\$1.05			\$1.01
Backgrounded Calf @ projected value \$/lb	616	lbs	\$671.44	683	lbs	\$737.64	750	lbs	\$780.00
	\$ 1.09			\$ 1.08			\$ 1.04		
Net			\$24.67			\$35.64			\$24.41

*Calf prices based on Iowa basis futures price projection
Rations based on the ISU Brands Program*

Cattle Market Situation and Outlook, 2010 and Beyond

Dr. John Lawrence, Extension Livestock Economist Iowa State University

INTRODUCTION

The U.S. beef sector is adjusting to higher prices for land, harvested feed, energy, and other costs during a global economic recession that is limiting demand for the product. Prices at all levels, retail meat, wholesale boxed beef, hide and offal, fed cattle, and feeder cattle are all lower in 2009 than 2008 in spite of 3% lower cattle slaughter. This economic pressure is expected to encourage further liquidation of the beef cowherd leading to a smaller calf crop, feedlot inventories and cattle slaughter through the first half of the next decade. While the adjustment will be economically painful, the smaller supplies should support higher cattle prices as the economy recovers.

This situation and outlook article will briefly describe the supply and demand conditions entering 2010 and discuss some simple tools for cattle price forecasting and risk management. It will also highlight two publically available longer-term forecasts of beef supplies and prices for the coming years. We will finish with a discussion of the management implications and management strategies for the years ahead.

CURRENT SITUATION

The beef sector is on track to harvest 33.2 million cattle in 2009, producing nearly 26 billion lb of carcass weight beef. These values are 3.3% and 2.2% lower than 2008, respectively, and the lowest levels since 2005. In spite of the lower supplies, fed cattle prices averaged 10% below the year before. Yearlings and calves were 8% and 5% lower, respectively. A decrease in supply and price at the same time points to a fall in beef demand, which is heavily influenced by the recession.

Beef supplies are forecast to decrease in each of the next two years and likely beyond. Compared to 2008, January to mid-October total cow slaughter was down 0.5% on 12% higher milk cow and 9% lower beef cow slaughter. For the same period, heifer slaughter was 3.6% lower while steer slaughter was down 4.6%. As a result, it is expected that January cow inventory will be modestly lower than the year before and the calf crop will continue to decline. Furthermore, the economic pressures on beef cowherds should encourage further liquidation. Beef supplies are forecast to decrease 1.5% in 2010 and an additional 1.1% in 2011, each compared to the previous year. If correct, total cattle slaughter in 2011 would be 31.8 million head, 7.4% lower than 2008.

Economic pressures on beef cowherds do not favor expansion. The USDA reported that the U.S. average pasture and land prices had doubled between 2003 and 2008. Iowa pasture land prices had a similar increase. While producers that own land may not recognize or feel the effect of rising land prices, those renting or looking to buy do. Competition from alternative land uses (recreation, crop production, timber, etc.) are contributing to higher prices. Non-feed costs continue to rise as well. The 2008 Kansas Farm Management Association summary reports the cost of producing a calf (580 lb) at \$720 and non-feed cost at \$380 per head. It will take higher calf prices for multiple years to bring about growth of the herd. Thus, expect smaller calf crops and higher calf prices, all else equal, until 2012 or beyond.

Beef and cattle imports also add to the U.S. supply. Beef imports in 2009 are approximately 11% larger than 2008 and are forecast to increase an additional 7% in 2010 before leveling off. Cattle imports are down sharply since the implementation of mandatory Country of Origin Labeling (MCOOL). During the first year of MCOOL (October 2008-September 2009) feeder and fed cattle imports from Canada decreased approximately 342,000 and 207,000 head, respectively. Feeder cattle from Mexico increased 68,000 head. This 481,000 head decrease in cattle imports is approximately three-fourths of one week's average slaughter.

As mentioned, beef demand is the challenge. The recession is global and exports have not grown at the same pace of earlier years. It is anticipated that the weaker U.S. dollar will be supportive of beef exports going forward. The domestic market is the largest user of U.S. beef. Nearly 94% of the beef coming out of U.S. plants is consumed domestically. Domestic demand is tied to consumer spending, which has decreased during the recession. The economy and consumer confidence will have to improve to show much improvement in beef demand. The somewhat good news is that poultry and pork are also struggling due to weak demand and supplies of the two competing means have declined, and when the economy does improve it will be at a time of relatively tight meat supply.

SOURCES OF OUTLOOK

There are several sources of production and price outlook for

cattle producers and they differ primarily by time horizon and source. In the short term, the futures market offers a consensus forecast of prices for a year or more in advance. Research has repeatedly shown that basis-adjusted futures are as good of forecast available for the short-term. However, the basis-adjusted futures forecast can still have a wide forecast error. Recent research shows that the average futures forecast error for one quarter out is 4% and it grows to 7% when two quarters out. Thus, in a \$90 market a 7% error says that the price will be as predicted, plus or minus \$6.30/cwt about two-thirds of the time. About one time out of six, prices will be less than the average (\$90 in this example) minus \$6.30 and there is an equal chance that they will be that much above what the futures are forecasting.

The point is that basis-adjusted futures prices are our best forecast and they aren't very good. Managers should beware of the forecast, have their own forecast in mind and, more importantly, have a strategy on how best to market their cattle based on the information they have. For estimates of basis see <http://www.extension.iastate.edu/agdm/livestock/pdf/b2-42.pdf>.

For more information about the futures as a price forecast see: <http://www.extension.iastate.edu/agdm/livestock/html/b2-61.html> and <http://www.extension.iastate.edu/agdm/livestock/html/b2-66.html>.

A relatively new tool that uses the futures market to forecast prices is BeefBasis.com. It is a free Web site that automatical-

ly pulls in the previous day's futures prices to forecast feeder cattle prices for a specific market on a chosen marketing date. It has auction specific data from twenty-three states and several locations in the states. For example, there are five auction markets in Iowa, fourteen in Missouri and six in South Dakota.

This tool is very good for a seller evaluating marketing dates, (i.e., "Should I sell at weaning or background for sixty to ninety days?") because he or she can forecast the selling price of the heavier animal at a later date. It is also helpful for a feeder cattle buyer choosing where to buy cattle because you can compare the historic price relationships of different locations for a particular type of cattle at a given time.

There are also fundamental outlook analyses based on economic models that try to capture the factors that impact beef supply and demand. These models typically have longer time horizons than the futures market. Two such models are highlighted here.

The Livestock Market Information Center (LMIC) is a cooperative of land grant universities and industry organizations. There is a staff that do the day-to-day work of managing data and updating models, but they also rely on input from economists at universities and the USDA, who are members. The LMIC forecast of beef supplies and cattle prices is in Table 1. Iowa Choice steers are approximately \$1/cwt below the 5-Market and Iowa feeder cattle and calves, on average, are similar in price to Southern Plains which are forecast in the table.

Table 1. Forecast of Change in Cattle Slaughter and Beef Supply and Cattle Prices

	Commercial		Live Sltr. Steer Price 5-Mkt Avg	Feeder Steer Price Southern Plains	
	Cattle Slaughter	Beef Production		7-800#	5-600#
	% Chg from year ago		\$/Cwt.)	(\$/Cwt.)	
2009					
I	-3.6	-1.9	82.18	93.86	109.42
II	-5.0	-4.3	84.47	99.63	115.56
III	-3.9	-3.2	83.05	101.21	109.37
IV	-0.4	0.7	84-85	94-96	103-106
Year	-3.3	-2.2	83-84	96-98	109-110
2010					
I	0.0	0.3	84-87	94-98	106-110
II	-4.5	-3.6	87-91	98-103	110-117
III	-1.3	0.1	83-88	102-108	115-121
IV	-3.9	-2.7	87-93	101-110	109-119
Year	-2.4	-1.5	86-89	99-105	110-117
2011					
I	-1.3	-0.4	88-95	97-106	111-122
II	-1.6	-1.1	92-100	103-113	115-126
III	-1.2	-0.3	86-95	106-117	117-130
IV	-3.4	-2.6	90-100	104-114	113-126
Year	-1.9	-1.1	90-96	103-113	114-126

Sources: Livestock Slaughter - USDA/NASS; Steer Prices - USDA/AMS Livestock Market News; Projections and Forecasts by LMIC. Forecast date October 23, 2009

The LMIC updates its quarterly forecast for up to two years in advance on a regular basis. The forecast is not published directly by LMIC, but is available from its members as they use it in their presentations and own forecasting analyses. The LMIC Web site also has a public section with links to analysts from around the country at <http://www.lmic.info/>.

A longer term forecast that is updated each year is available from the Food and Agricultural Policy Research Institute (FAPRI), a joint effort by Iowa State University and the University of Missouri. FAPRI is funded by Congress to do agricultural policy analysis including changes in regulations, Farm Bill provisions, and trade agreements. Each year, a ten-year baseline forecast is published for several commodities and countries.

Obviously, if short-term forecasts are difficult as we saw with the futures forecast error, precise long-term forecasts are nearly impossible. However, the FAPRI model has two advantages that make it work considering. First, it is internally consistent. While there may be a shock to markets initially, commodity prices will respond to one another and will return to a long-run equilibrium. Knowing that path of adjustment is helpful. Second, the forecast, however flawed, is better than nothing and better than assuming that current conditions will persist each year forever. The model does incorporate the real world of biology, policy and prices to forecast supplies and price. Figure 1 shows the forecast prices estimated in the spring of 2009.

First, notice that the forecast for 2009 fed cattle was too optimistic, but it was consistent with most short-term forecasts at that time. Second, the model doesn't capture the year-to-year variation that is likely to occur. These issues aside, the model predicts a continued slow reduction in cattle inventories and generally higher calf and fed prices until 2014 before leveling

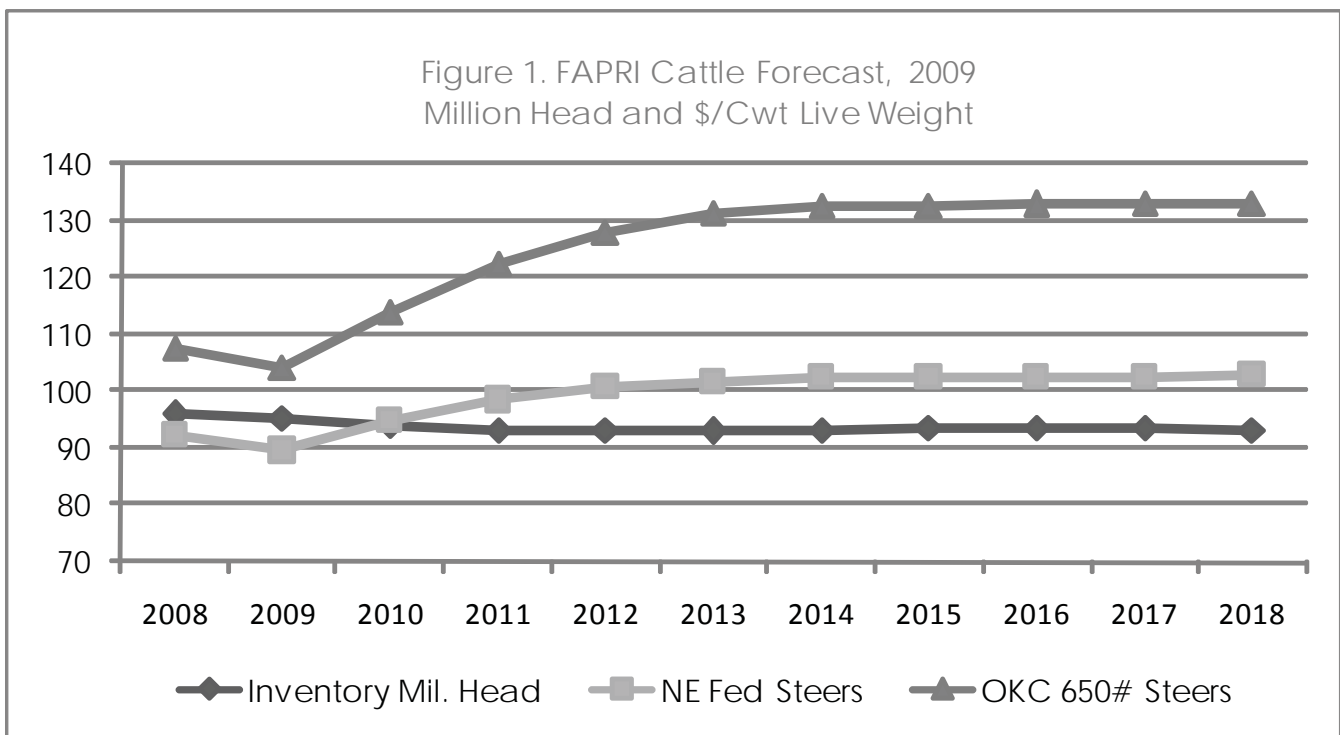
off. Watch for a new forecast each spring at: <http://www.fapri.iastate.edu/outlook/>.

MANAGEMENT IMPLICATIONS

The forecast, regardless of the time horizon, is for higher prices in 2010 and 2011 than we had in 2009. As discussed, there are also risks associated with the forecast as variables change and there are errors in the forecasts even if the variables are predicted correctly as consumer preferences and weather conditions come into play. The management challenge is to stay current on the best available forecasts for each time horizon and then determine the appropriate production or marketing action. The following are two simple tools to help evaluate marketing opportunities.

First, is a simple matrix to determine the breakeven purchase price for feeder cattle given a set of assumptions and varying fed cattle and corn prices. Producers must use their own numbers for input quantities and price, but this provides a ballpark forecast of feeder cattle prices for a given fed cattle market. For example, if the finished steer is expected to sell at \$91 and the corn price is \$4/bu then the breakeven purchase price for a 650-lb steer calf is \$112/cwt. The assumptions for an individual feedlot and class of cattle will be relatively stable with the exception of the price of hay and distillers grains. A generic spreadsheet where producers can enter their own input assumptions is available at <http://www.iowabeefcenter.org/content/breakevenworksheet.xls>.

Another tool to help identify cattle feeding opportunities and therefore potential changes in feeder cattle prices is the "Crush Margin." The Crush Margin uses basis-adjusted futures prices to calculate the margin or difference between the value of a 1250-lb Choice steer or a 750-lb steer and 50 bu of corn. This margin is the money left to pay all the other costs and earn a profit. Depending on the individual farm's cost, the crush



margin needs to be about \$150-160 to breakeven. The Crush Margin (Figure 1) is updated each Wednesday and is reported along with the trend in margins at <http://www.econ.iastate.edu/faculty/lawrence/Excel/cattle%20crush%20web.htm>, along with an explanation of the margin and how it has performed in the past by selling month.

This crush margin graph was calculated based on October 28 futures closing prices and covers cattle placed as distant as September 2010 to be sold in February 2011. It indicates that there is an opportunity to hedge a crush margin over \$150 for cattle placed in November through January by buying feeder cattle futures and corn futures and selling live cattle futures. When the actual feeder cattle and corn are bought those futures positions are offset. There are also \$150 opportunities for cattle placed in July and August. Even if you do not use futures

to capture the margins, this variable is informative. One might expect that feeder cattle prices may be bid up in the months that offer profits and may be bid lower in the months not offering a positive return.

SUMMARY

Marketing and management decisions are increasingly complex and the stakes are large given the volatility in the market place. Price forecasts are readily available from a variety of sources and differ by the time horizon considered. It is important to stay current on market information, but recognize that forecasting is not an exact science. The challenge is to act upon the information to capture opportunities when they are presented.



The Information-Based Marketplace

Auction Market Survey Summary

-Program Specialist-
ISUE Beef Program Specialist
-Date-

IOWA STATE UNIVERSITY
University Extension

A Changing Cattle Market



- Greater differentiation in cattle and price
- Greater demand by buyers for information
- Trend to certified verified programs



Lots of Questions



- What impact does selected management practices have on calf value?
- Does it pay to implement these practices?
- How do cow-calf producers address 'coffee shop' talk?
- Many more.....



What Factors Impact Calf Value??

- Sex
- Weight
- Lot size
- Uniformity
- Condition
- Genetic potential
- Health
- Fill
- Frame
- Castration
- Horns
- Color
- Reputation
- Others ??



Market Factors?

- Time of sale
- Time of year
- Industry news
- Cattle futures prices
- Corn and feed prices
- Number of buyers
- Number of lots



Surveys Abound!

- Iowa State University
- Cattle Fax
- Montana State University
- Kansas State University
- North Dakota State University
- Plus others



The Value of Third Party Certification Claims (ISU)

	% calves in study	Premium /cwt
Certified vaccinated & weaned 30 days	37	\$6.12
Uncertified vaccinated & weaned 30 days	17	\$3.35
Vaccinated & weaned < 30 days	11	\$3.12
Vaccinated, unweaned	21	\$2.41
Weaned, unvaccinated	4	\$1.66
Unweaned, unvaccinated	8	0
Steers	52	\$8.92

Data were collected at 105 sales that took place in nine Iowa auction markets from October 20, 2005 to February 24, 2006. There were 19,046 lots from 20 preconditioned, 5 featured, and 80 special sales.



Impact of Age and Source Verification via Video Auction

		adjusted to 600 lb calf	
	% calves in study	Premium /hd	Premium /cwt
Age & Source verified	31	\$12.83	\$2.13
Vaccinated	88	\$14.81	\$2.47
Weaned	15	\$17.64	\$2.94
Steers	60	\$52.43	\$8.74

Montana State University, July 2007
68,665 Montana calves through Superior Livestock Video



Cattle Fax Analysis of Video Auction

Weaned

Premium

\$5.63/cwt

Source & Age Verified

\$3.47/cwt

45% of steer calves for fall delivery were S&A verified

Natural

\$1.20/cwt

34% of steer calves for fall delivery were natural

Cattle-Fax, July 2009 WVM and Superior video auction data
For steer calves, Sep-Nov delivery, approx. 180,000 head



2009 IBC Auction Market Survey



- Ten Iowa auction market managers interviewed by beef specialists
- October to December 2009
- Surveyed about what practices add most value



2009 IBC Auction Market Survey

- **Health Practices: (rank and the percent of producers using practice)**
 - 1) **Preconditioned and vaccinated with veterinary certification - (62.5%)**
 - 2) **Healthy appearance - (85%)**
 - 3) **Double vaccinated by producer - (37.5%)**



2009 IBC Auction Market Survey

- **Management Practices:**
 - 1) **Using superior cow herd genetics - (72.5%)**
 - 2) **Delivering calves in proper body condition - (66%)**
 - 3) **Weaned for 30 or more days - (56%)**



2009 IBC Auction Market Survey

- **Marketing Practices:**
 - 1) **Marketing at special feeder sale - (73%)**
 - 2) **Cattle from reputation herds - (72.5%)**
 - 3) **Marketing date (timing) – (72%)**



2009 IBC Auction Market Survey

- **Other comments/concerns:**
 - **Loss of cow calf operations**
 - **Government regulations**
 - **Consumer demand for beef**
 - **Lack of opportunities for young producers**



Add Value Through Age and Source Verification

- It is NOT a federally mandated NAIS
- USDA marketing option for export markets
- Requires on-site audits and paper trails
- A third party audits your system
- QMS = the written procedure outlining specifics of QSA's and PVP's

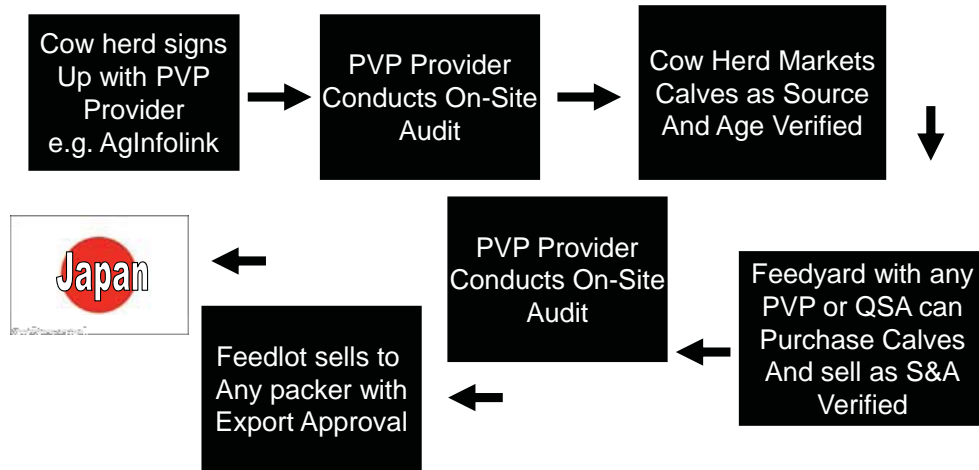


How do they compare?

	PVP - Process Verified Program	QSA - Quality Systems Assessment
Tags	EID or Visual <small>(depends on the program)</small>	EID or Visual <small>(depends on the program)</small>
QMS	Yes	Yes
On-site Audit	YES	YES
Data retention	3 years	3 years
Premiums	Yes	Yes
Marketing	Anywhere	Specific to provider
Cost	\$/hd + Audit fee	Generally free
Audits by	Data Service Provider	Packer



FLOW Chart Example PVP



What is the premium?

Generally \$20-40/head

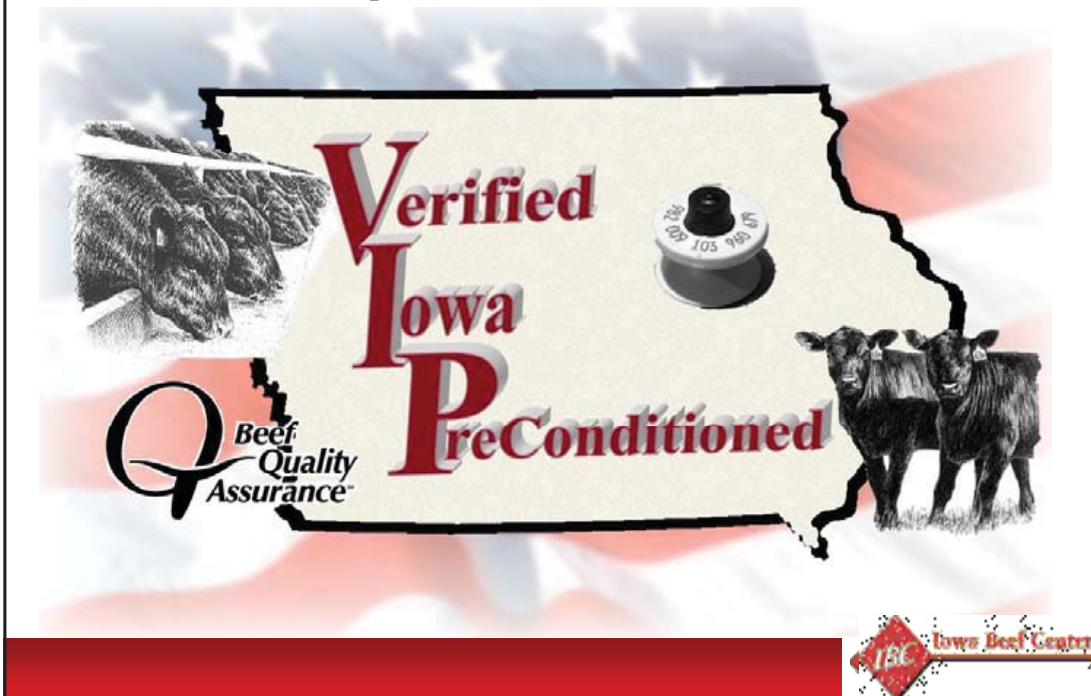
Packers pay premiums to the feedlots.



However, the PVP has to start at the cowherd.



Capitalize on PVP?



1. **Verified enrollment in a USDA PVP**
2. **Verified Weaning & Vaccination
Green or Gold Tag**
3. **Verified Beef Quality Assurance
certified**
4. **Verified Data Collection and
Management Program thru DSP**



Benefits To Cow Herds

1. Access to premium markets
2. Herd Management Program
3. Reputation & known value of Iowa Cattle



Benefits To Feedlots:

1. Verified Enrollment in a PVP
2. Calf health
3. Performance
4. BQA certified



Now's the Time!

How do I get started with a PVP?

[http://www.ams.usda.gov/AMSV1.0/getfile
?dDocName=STELPRD3320450](http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRD3320450)

Kellie Carolan

ICA AgInfoLink Verification Partner



**The world in which you
operate has fundamentally
changed.**

**How have you changed
your business??**



the value of **third-party certification claims** *at Iowa's feeder cattle auctions*

The majority of U.S. feeder cattle

are sold through auction markets. While auctions are very efficient at bringing buyers and sellers together for price discovery, signaling the value of cattle at auctions framework is often a challenge. This is particularly true for unobservable traits such as vaccinations and previous management of the cattle. The root of the problem is that buyers cannot assess the quality of cattle at a low cost, and sellers have incentive to overstate the condition of their animals.

Third party programs, such as state-sanctioned green or gold tag preconditioning programs, or similar private company programs, have potential to mitigate this problem provided that buyers trust the integrity of programs and procedures. Previous research has reported what preconditioning is worth to buyers due to better performance and grade, and has found premiums in some markets for preconditioning. However, the studies have not evaluated the value placed on the source of the claims made in terms of third party versus sellers themselves.

After taking into account the cattle and sale characteristics and market conditions, we considered the following categories for the amount and source of vaccination and weaning claims,

- Category 1: Calves with certified vaccination claims and weaned at least 30 days.
- Category 2: Calves with uncertified claims (the seller's word) of vaccinations and at least 30 days weaning
- Category 3: Calves with vaccinations but without a 30 days weaning claim (either no date mentioned or mentioned that weaned less than 30 days).
- Category 4: Calves with vaccination claims but not weaned.



A calf certified by Iowa's green and gold tag programs.

- Category 5: Calves with weaning claims but not vaccinated.
- Category 6: Calves neither weaned nor vaccinated, or no claim made.

We emphasize the vaccinations and at least 30 days weaning are requirements of preconditioning. The other requirements such as dehorning, castration, etc can be considered as part of good management practices. Note that calves in categories 1 and 2 satisfy both vaccinations and at least 30 days requirements. Calves in the remaining categories fail to satisfy either requirement or both. In Iowa green tag preconditioning program, vaccinations (done by a veterinarian) are not enough to get a preconditioning certificate, calves must be weaned at least 30 days in order to be considered as preconditioned. At that time, the veterinarian signs the certificate.

Data and Methods

Data were collected at 105 sales that took place in nine auction markets located in southern,

the value of third-party certification claims

southwestern, southeastern and western Iowa from October 20, 2005 to February 24, 2006. There were 20 preconditioned, 5 featured, and 80 special sales. Four data recorders worked with USDA market reporters to record detailed visual, physical, and announced information characteristics about each lot of cattle as they were sold. These data are the same information that buyers at the auction would observe. Market conditions for the day of the sale including daily live cattle futures prices and cash corn prices were included in the econometric analysis. In total, sale information from 20,051 lots was analyzed. The median lot size is 5 head. Lots are 52% steers, 69% black and black mixed, and 4% yearling. Lots with calves are 41% certified vaccinated and weaned, 24% uncertified vaccinated and weaned, 22% vaccinated but not weaned, 4% weaned but not vaccinated, and 9% neither vaccinated and nor weaned.

The data were analyzed using a linear regression model where the price received by a lot of feeder cattle is a function of a set explanatory variables or characteristics, which are listed in Table 1. This type of modeling, called hedonic pricing models, is commonly used in the literature studying the valuation of feeder cattle. The resulting coefficients are the dollar change in price due to a one unit change in the variable holding all other factors constant. It also indicates if the variable is statistically significant.

Estimations and Results

The estimation results are reported in Table 1. The model has an adjusted $R^2 = 0.71$, indicating that it explains 71% of the variation in price, and is close to the value reported in previous literature. All variables are significant with p-values less than 0.0001 except monthly factor for December which is not significant with p-value of 0.19. There is a strong seasonal pattern to feeder cattle prices, and December not being significant could be due to exceptional weather conditions in December 2005. It was extremely cold early in the month, later it got warmer, which made pens muddy.

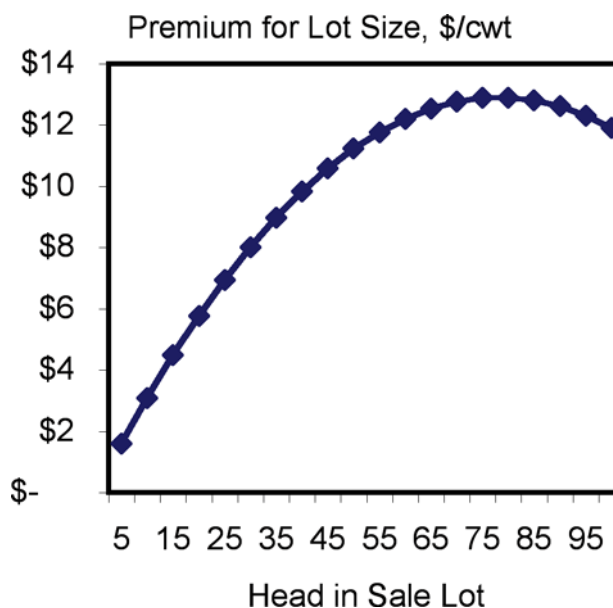


Figure 1. As with previous research, this analysis found that prices are higher for larger groups of animals. As the figure shows, the prices increase at a decreasing rate with a maximum of \$12.90/cwt at 78 head or about a truck load.

The parameter estimates are consistent with the previous literature. They are premiums/discounts per cwt relative to the base lot of cattle sold. The base lot is defined as heifer, dehorned, non black, not fleshy, healthy and clean calves without vaccination and weaning claims. The model treats each factor independently and thus the coefficients can be added for various factors as shown in the example below.

Prices increase for larger groups of cattle but it increases at a decreasing rate and this premium reaches a maximum at 78 head or about a truck load (Figure 1). Premiums also increase with the size of the sale, but at a decreasing rate suggesting that larger sales attract more buyers.

As expected, steers and bulls bring more than heifers, and hide color, horns, and appearance and condition impact price. As expected price decreases at a declining rate as weight increases. Figure 2 shows the

Table 1 . Statistically Estimated Premiums and Discounts at Iowa Feeder Cattle Auctions for Specific Cattle and Market Attributes, 2005-2006

Dependent Variable: Average Lot Price / cwt	R ² = 0.71
Number of Observations: 20,051 lots	
Explanatory Variables	Estimates (\$/cwt.) *
Intercept	124.98
Weight	-0.17
Weight Squared	0.000059
Yearling (Base: Calves)	5.95
Heifer	Base
Steer	8.71
Bull	2.51
Black and Black Mixed (Base: Non-Black)	3.06
Horns (Base: No Horns)	-1.70
Fleshy (Base: Not Fleshy)	-2.41
Healthy and Clean	Base
Sick but Not Dirty	-9.36
Healthy but Dirty	-1.18
Sick and Dirty	-12.40
Lot Size	0.33
Lot Size Squared	-0.00211
Sale Size (in thousand head)	2.54
Sale Size Squared (in thousand head)	-0.00028
Live Cattle Futures	0.72
Corn Prices (in cents)	-0.05
Monthly Variable for October	Base
Monthly Variable for November	1.55
Monthly Variable for December	0.46
Monthly Variable for January	3.39
Monthly Variable for February	6.61
Certified Vaccinated and Weaned at least 30 days	6.15
Uncertified Vaccinated and Weaned at least 30 days	3.40
Vaccinated and Weaned Other (no date, or less than 30 days)	3.14
Vaccinated but Not Weaned	2.42
Weaned but Not Vaccinated	1.70
Not Vaccinated and Not Weaned	Base

* All significant with p-value < 0.0001 except monthly time dummy for December which is not significant with p-value 0.19. P-values are based on chi-square statistics with one degree of freedom and using heteroscedasticity robust standard errors.

the value of third-party certification claims

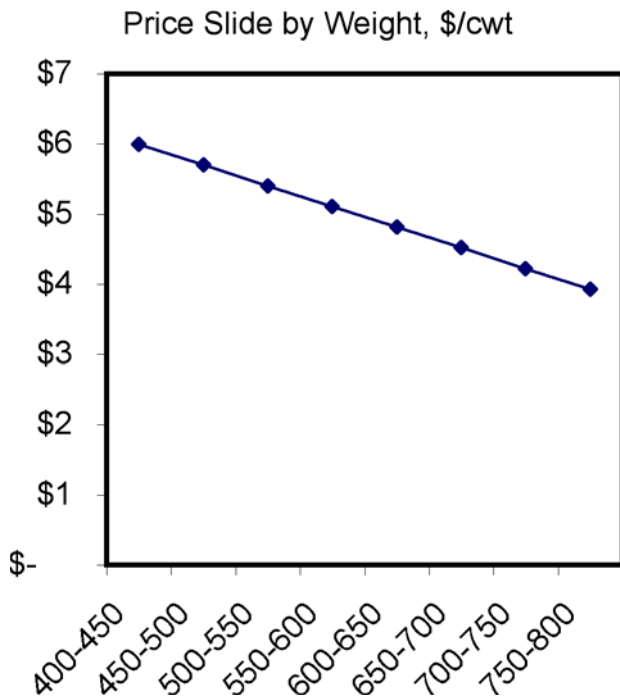


Figure 2. Between 400-450 pounds, the slide is approximately \$6/cwt and between 750-800 pounds, it is closer to \$4 /cwt.

price slide at different weight ranges. Between 400-450 pounds the slide is approximately \$6/cwt and between 750-800 pounds, it is closer to \$4 /cwt.

Live cattle futures have a positive relationship with feeder cattle price; \$1 increase in live cattle futures led to a \$0.72 increase in feeder prices. Corn price has a negative relationship; a penny increase in corn led to a nickel decrease in feeder cattle prices.

Seasonally, feeder cattle prices increase after October. As mentioned, the December coefficient was not significant and is expected to fall more in line between the November and January values in a normal year.

Certification Value

After accounting for the basic cattle, sale and market variables, here is what was found regarding the value of the amount and source of vaccinations and weaning information to buyers. Recall that the base is calves without vaccination and weaning claims

Category 1: Calves with certified vaccination claims and weaned at least 30 days have a premium of \$6.15/cwt over the base. These calves are mostly Iowa Green Tag Preconditioned, but also include Iowa Gold Tag (nearly 10%) or other similar private programs (5%).

Category 2: Calves with uncertified claims (the seller's word) of vaccinations and at least 30 days weaning received \$3.40/cwt more than the base. The relative premium between this category and the first category is \$2.75/cwt, which is statistically significant (p-value < 0.0001).

Category 3: Calves with vaccinations but without 30 days weaning claim (either no date mentioned or mentioned that weaned less than 30 days) received \$3.14/cwt more than the base. This premium is statically different than the first category (with p-value 0.0001) but not different from the second category (with p-value 0.22).

Category 4: Calves with only vaccination claims received \$2.42 more than the base.

Category 5: Calves with only weaning claims received \$1.70 more than the base. The premiums in fourth and fifth categories are statistically different than each other at the 5% level of significance. They are also different from the premiums in the first, second, and third categories at the 1% level of significance.

In summary, more practices and information receive a higher premium than less, and third-party certification is worth more than seller's claim.

We convert these per cwt premiums to per head benefits in a 500 lbs calf example as follows. Comparing category 1 to 2, this is a \$13.75/head benefit to a third party certification program over the producer buying the vaccine and doing the same work and making the claim himself (\$2.75/cwt x 5 cwt = \$13.75). This benefit exceeds the additional marketing costs (tags, commission, etc) due to participating to third party programs, which additional marketing costs (tags, commission, etc)

due to participating to third party programs, which is reported as \$5/head at maximum in the literature. Even though the premium for category 2 is slightly higher than the premium for category 3, they are not statistically different from each other, therefore, similar per head benefit for calf in category 1 can be expected over calf in category 3.

Finally, a calf in category 1 is worth \$18.65/head and \$22.25/head more, respectively than a category 4 (vaccinated but not weaned) and category 5 (weaned but not vaccinated) calves.

Fall Calf Marketing Decisions

How can producers use these results to receive more net dollars from their calf crop? Consider the decision of whether to sell at weaning or to vaccinate and wean 45 days. For this example assume that calves are black, steers, dehorned, healthy and clean. The lot size and sale size is all the same in either case. The calves can be sold at weaning on November 1, 2005 with a pay-weight of 500 pounds right off the cow without vaccinating.

Alternatively, the producer could precondition the calves for 45 days and sell on December 15, 2005 with a third party certification of vaccination and weaning. The preconditioning option targets a pay-weight gain of 100 lbs in 45 days period (2.22 ADG). Because the average fleshy cattle weigh 651 lbs in November in our data set as opposed to 600 lbs calf in this example, we assume calves do not look fleshy after preconditioning. There is \$6.15/cwt premium for certified vaccinated and weaned calves.

The December 15 quote for June live cattle futures and corn prices are unknown on November 1. We initially assume the same live cattle price and corn price for December 15 as it was on November 1. Later, we report the impact of changes in these prices on the profit. The coefficients of monthly effects indicate that December calves are discounted \$1.09/cwt to November (normally December would be higher).

Putting these data under both scenarios into the estimated regression equation in Table 1 result in the following price differences.

For this example assume that similar 500 pound steer calves are selling for \$130/cwt in November right off the cow with no vaccination. The only things that change are the weight, date, and preconditioning, all other variables, including cattle futures and corn prices are held constant. The difference between November (\$1.55) and December (\$.46) in this project is -\$1.09 and the premium on certified vaccinated and weaned is \$6.15. The price slide between 500 and 600 pounds can be observed in the market, but in our example is -\$10.51 calculated as $(600 \times -.17 + 600^2 \times .000059 = -80.76) - (500 \times -.17 + 500^2 \times .000059 = -70.25)$. Thus, the price difference between the 500-pound calf in November and the 600-pound calf in mid-December is $\$6.15 - 1.09 - 10.51 = \$-5.45/\text{cwt}$ and the expected selling price for the 600 pound preconditioned steer is \$124.55/cwt.



A veterinarian tags a preconditioned calf.

the value of third-party certification claims

Using these estimated prices, the gross revenue per head for the calf at the two different weights are: $500 * \$130 = \650 versus $600 * \$124.55 = \747.30 for selling at weaning and after preconditioning, respectively. This gross difference of \$97.30 must be compared to the expected preconditioning cost listed below:

Feed cost:	\$28.35
Death loss @1%:	6.50
Treatment cost 20%@\$20:	4.00
Vaccination:	11.00
Interest expense:	7.00
Labor:	5.00
Total:	\$61.85

Subtracting the preconditioning cost from the gross value difference leaves a \$35.45/head return (to facilities and management) advantage to preconditioning in our example. Individual producer's costs may vary.

One risk is that the feeder cattle price level can change during the preconditioning period. From Table 1 we see that a \$1/cwt change in live cattle futures resulted in a \$.72/cwt change in the feeder cattle price. Likewise, a one cent change in corn price resulted in a .05/cwt change in feeder cattle prices. The \$35/head advantage to preconditioning is approximately \$5.83/cwt on a 600-pound calf. Thus, live cattle futures would have to decrease over \$8/cwt

or corn prices would have to increase \$1.17/bu in 45 days to eliminate this gain. Some combination of higher corn or lower cattle futures would also wipe out the \$35/head gain, but you can see it is a relatively safe investment.

Conclusion

We found that third party certification (TPC) of preconditioning claims (certified vaccination and at least 30 days weaning claims) receives a significantly (both in statistical and economic sense) higher premium than similar uncertified claims. The difference exceeds the unit participation cost of TPC on average. This shows that the third party certification in preconditioning claims is supported in the market. It also shows that significant value can be lost if information is not trusted and/or not delivered to the market, even if all work is really done. The estimated premiums for certified vaccinations and weaning claims are found to be higher compared to early studies but consistent with the most recent ones. This may indicate that the reputation of these programs improved over time.

The explanatory variables in Table 1 take into account the main aspects of feeder cattle marketing decisions, therefore, the estimated regression equation should have practical value to producers as they can evaluate alternative production and marketing strategies by plugging the relevant data. We provide an example for a typical scenario.



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Rachel E. Martin, communications specialist, Iowa Beef Center, Iowa State University

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File: Beef 4-2

Appendix B

Official Listing of Approved USDA Process Verified Programs

*Companies with age verified claims meet the requirements of the EV Program for Japan

Company	Claims Verified	Program Scope	Verification Information
<p>ABS Global, Inc. 1525 River Road DeForest, WI 53542 Phone: (303) 840-7861 Email: dwilkes@absglobal.com Contact: Darrell Wilkes</p>	<ul style="list-style-type: none"> • Source Cattle to the ranch of origin, & • Provide group age verification 	<p>Livestock: Cattle (Beef)</p> <p>Location(s): Producers & Feedyards</p> <p>Service(s):</p>	<p>PVP Certificate No. PV835 Effective Date: February 8</p> <p>Renewal Date: February 8 Extension Date: March 31</p>
<p>AgInfoLink USA 1860 Lefthand Circle, Suite G Longmont, CO 80501 Phone: 303-682-9898 Email: Carrie.Lewis@aginfolink.com Tyler.strathe@aginfolink.com Contacts: Carrie Lewis, Verified Services Manager Tyler Strathe, Senior Sales Manager</p>	<ul style="list-style-type: none"> • Meat & Livestock Data Verification (Including Age and Source) • Unit of Production Traceability • Accurate & Reliable Information Exchange • Data Integrity, Security, & Auditability • Data Service Provider • Non-Hormone Treated Verified Beef Cattle (NHTC) with approval number PV8172MMA 	<p>Livestock: Cattle (Beef)</p> <p>Location(s): Producers, Dairy Calf Ranches, Feedyards, & Auction Markets</p> <p>Service(s):</p> <ul style="list-style-type: none"> • Program Compliant Tags • Data Service Provider • NAIS Approved Interim Animal Tracking Database • Offsite Tagging Locations 	<p>PVP Certificate No.: PV929 Effective Date: October 12</p> <p>Renewal Date: September 12, 2010</p>
<p>AngusSource® – American Angus Association 3201 Frederick Avenue St. Joseph, MO 64506 Phone: (816) 383-5100 Email: ssnider@angus.org Contact: Sara Snider</p>	<ul style="list-style-type: none"> • Cattle have a minimum of 50% Angus Genetics • Source Verified Cattle • Age Verified Cattle • Gateway – second tier program to verify Age & Source 	<p>Livestock: Cattle (Beef)</p> <p>Location(s): Producers & Feedyards</p> <p>Service(s): Program Compliant Tags</p>	<p>PVP Certificate No.: PV9226BBA Effective Date: October 18, 2005</p> <p>Renewal Date: May 1, 2010</p>

For a complete listing, go to <http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRD3320450>



A cooperative educational brochure through:

Colorado Department of Agriculture

Animal Industry/Colorado Animal ID

700 Kipling Street, Suite 4000

Lakewood, CO 80215-8000

Phone: 303-239-4116

Fax: 303-239-4164

Email: premisereg@ag.state.co.us

Web site: www.COanimalID.org



United States Department of Agriculture

Agricultural Marketing Service

Livestock and Seed Program

Audit, Review, and Compliance Branch

100 Riverside Parkway, Suite 135

Fredericksburg, VA 22406

Phone: 540-361-7640

Fax: 202-690-1038

Email: ARCBbranch@usda.gov

Web site: www.ams.usda.gov/lsg/arc/audit.htm

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January 2008

Dispelling the Myths About Livestock Marketing Programs for Producers



**Agricultural Marketing Service
Livestock and Seed Program**

**Supporting American Agriculture
with Marketing Services that Matter**

What are USDA verification programs?

Why do our verification services matter?

Livestock producers can request the voluntary, user-fee services of the U.S. Department of Agriculture (USDA), Agricultural Marketing Service (AMS) to verify specific practices as a means to potentially increase the value of their products. This service is accomplished with independent, third-party audits that verify a company's documented quality management system. Quality management systems identify and preserve certain characteristics and processes that are critical to a product. This also ensures truth in labeling for the consumer.

Our Industry and Customers Demand It!

USDA Process Verified Program (PVP) along with its close cousin, USDA Quality System Assessment Program (QSA), have been gaining U.S. customer support and have more recently been recognized by our foreign customers in Japan as being an approved method for verifying that cattle are 20 months of age or younger. Over 20 additional countries and numerous domestic clients also depend on these programs to verify preservation of characteristics and requirements.



Simply stated, verification programs provide a structure for producers and the livestock industry to show "we are doing what we say we are doing."

Our Future Depends on It!

These programs coupled with good husbandry practices will improve the overall U.S. herd and ultimately make U.S. beef producers more competitive in today's global market.

Dispelling the Myths About Verification Programs

Myth: Producers must have their own individual USDA verification program.
Fact: Producers may apply for their own program or they can contract with an existing USDA-approved Process Verified Program to participate in verification programs under their umbrella.

Myth: USDA verification programs are expensive and time consuming.
Fact: Depending on the method of verification, the costs may be very low. USDA announced that onsite audits for producers are no longer mandatory. That means faster approvals and reduced verification costs.

Myth: USDA verification programs require a lot of paperwork.
Fact: Most producers are able to participate in programs using production records they normally keep for their own production purposes.

Myth: All producers must be audited by USDA.
Fact: All producers are not audited by USDA but rather by USDA-approved PVP companies. It is possible that USDA will visit a producer while conducting audits on approved PVP companies.

Myth: All producers must be evaluated onsite prior to approval.
Fact: USDA-approved PVP companies must evaluate producers to assess their level of risk. Producers can then be evaluated onsite, offsite (through a phone interview and a review of production records and other supporting documentation), or not approved.

Myth: Farmers/Feeders cannot be considered producers.
Fact: Farmers/Feeders are considered producers as long as they limit their operations to finishing their own animals. They must have a closed herd and not purchase animals from other sources; otherwise, they will be considered feedyards.

Myth: All age and source verified cattle are accepted for export verification markets.
Fact: No. To qualify for export verification markets, age must be verified by USDA. Not all commercially verified age and source cattle qualify.

Dispelling the Myths About Verification Programs

Myth: National Animal Identification System (NAIS) Premises ID is required to participate in USDA verification programs.

Fact: NAIS Premises IDs standardize physical location of livestock and is the foundation of NAIS. Premises registration is voluntary; AMS encourages participation in NAIS but it is not a requirement for eligibility in the PVP and QSA Programs.

Myth: Brands cannot be used as an acceptable form of identification.
Fact: Brands may be used as the primary form of identification at a farm/ranch when there is only one defined calving season and when no outside calves are purchased and brought onto the farm/ranch. When marketed the animals must be moved directly from the farm/ranch of origin to a USDA-approved supplier with an approved tagging procedure. Animals must receive an ear tag upon arrival at the approved supplier.

Myth: Calves must be identified with an RFID tag.
Fact: RFID and EID tags are not required to participate in the programs. Calves can be identified with ranch tags, and, in some instances, brands may be used to identify cattle.

Myth: All PVP Programs require Program Compliant Tags (PCT).
Fact: PCTs are not a requirement but can be used in both PVP and QSA Programs. When PCTs are applied at the farm/ranch of origin, producers have the most flexibility in marketing animals with age, source, or breed claims because once the tags are applied and the data recorded into the approved system, the animals may be marketed through USDA-approved or unapproved suppliers. At any point in the animal life-cycle, a supplier can verify the animals are still eligible for inclusion in a USDA-approved program for age, source, or breed.

Myth: Program compliant and non-program compliant animals cannot be commingled.
Fact: Animals verified for age, source, breed, and, in some cases, the Non-Hormone Treated Cattle (NHTC) Program, may be commingled with non-program animals as long as they are properly identified.

What is keeping you from participating?

You may already have what it takes to participate in a verification program. The majority of producers currently maintain all of the records necessary.

You can determine whether you qualify if you already maintain the following records:

1. **Calving season**—Dates of first and last calves born in a calf book, on a calendar, or other production record.
2. **Groups of cattle**—For multiple calving seasons, distinction of animals in each group and date of births.
3. **Artificial insemination**—Semen purchases and servicing dates.
4. **Calf identification**—Brands, ear tags, or both.
5. **Purchase from other sources.**
6. **Method of marketing**—Auction market, back grounding, or direct to a feedyard.

How do you get started? Visit
www.ams.usda.gov/lsg/arc/audit.htm
or call 540-361-7640

What are the different roles of AMS and other USDA Agencies?

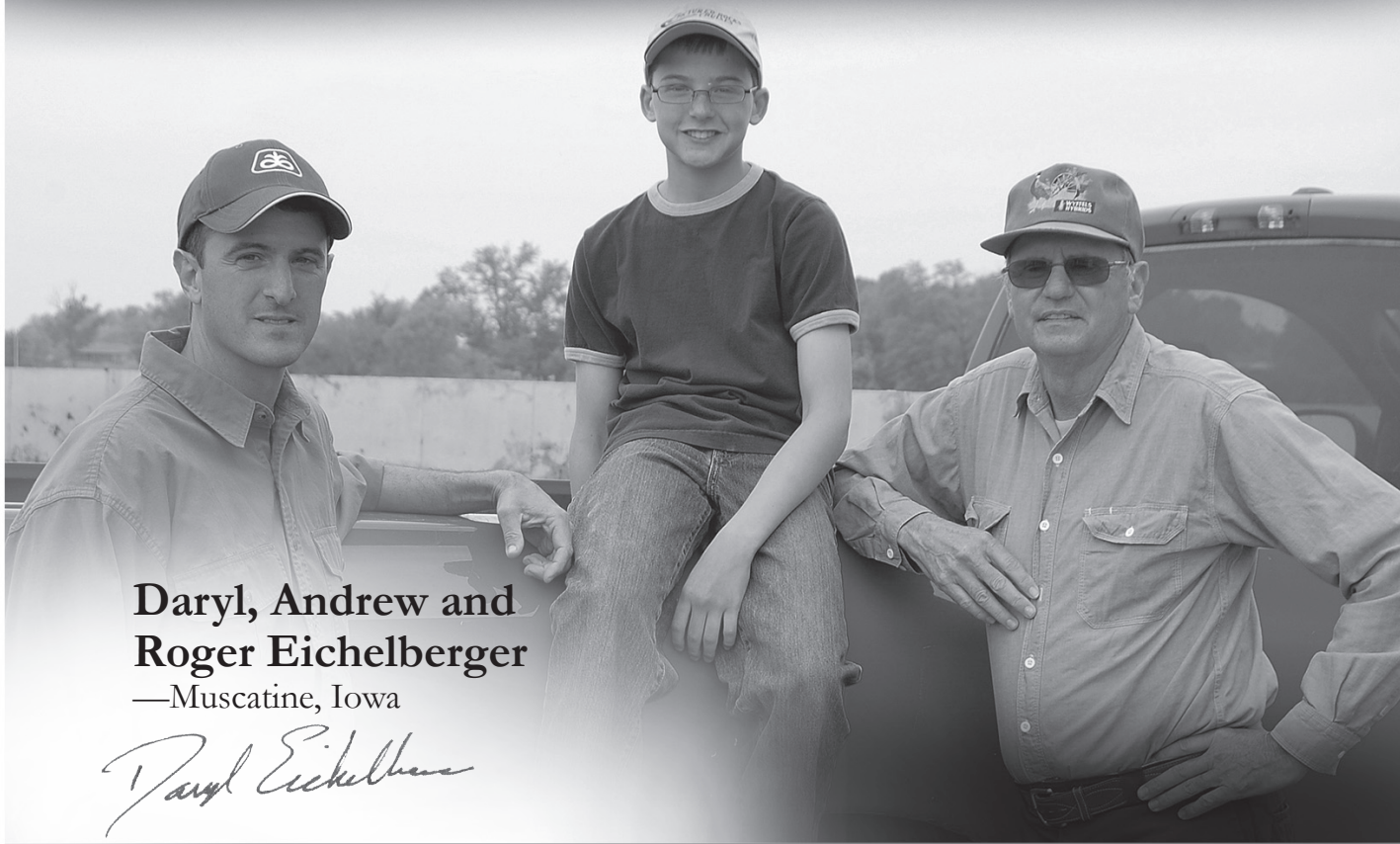
The mission of the **Agricultural Marketing Service (AMS)** is to facilitate the strategic marketing of agricultural products in domestic and international markets. AMS works cooperatively with its sister agencies, the Food Safety and Inspection Service (FSIS) and the Animal and Plant Health Inspection Service (APHIS). AMS activities extend beyond regulatory requirements to address market needs for livestock, meat, and meat products.

APHIS' mission is to protect the health and value of American agriculture and natural resources. A top priority for APHIS is implementing the voluntary National Animal Identification System (NAIS) to assist in safeguarding U.S. livestock and poultry in the event of an outbreak. NAIS is made up of three parts: premises registration, animal identification, and animal tracing.

FSIS protects public health through food safety and defense. FSIS is USDA's public health agency responsible for ensuring that the Nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and correctly labeled and packaged. FSIS regulates the Non-Hormone Treated Cattle Program and the Export Verification Programs.

Doing Things Right

Starts with me



**Daryl, Andrew and
Roger Eichelberger**
—Muscatine, Iowa

Daryl Eichelberger

Daryl Eichelberger has a passion for raising cattle and knows it comes with a responsibility to care for the animals and the environment. So when he decided to replace an old, outdoor lot with a modern cattle barn, he called on the Coalition to Support Iowa's Farmers.

“The Coalition helped me choose the best location for my new barn and to meet all rules and regulations. I wouldn't have it any other way. I love



what I do, and I want to be sure I do things right so my children have the opportunity to stay on the farm and raise livestock. My son is already my right-hand man, and I want to set a good example for him.”

At no cost, the Coalition can help you do things right when it comes to raising livestock responsibly and successfully. Call 800-932-2436 or visit supportfarmers.com today!

Growing communities one farmer — and one neighbor — at a time

800-932-2436 | www.supportfarmers.com

Iowa Cattlemen's Association, Iowa Corn Growers Association, Iowa Farm Bureau Federation,
Iowa Pork Producers Association, Iowa Poultry Association, Iowa Soybean Association, Iowa Turkey Federation

. . . and justice for all

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