Moore On Cattle *by Sherry Bunting*

Penn State professor emeritus Lou Moore was recognized for 40-plus years of doing the cattle outlook at Lancaster Cattle Feeders Day in January. While he forecasts corn will remain plentiful and cheap for livestock feeders through 2015, fat cattle prices will be pressured a bit by the cheapening prices for poultry and pork. It won't be easy to make money this year given the cost of feeder cattle in relation to fats, but it's doable as feed costs are down and the price feed ratio for livestock is improving.

Moore expects fed cattle to average above $150/cwt for the next 18 months.

He said the trade expects a 40 to 45 day carryover when next season's harvest begins and noted the negative returns on corn showed losses of $100/A on land rents. "Land prices are falling, but that's peculiar to your situation and neighbors," he said.

The U.S. imported 1.2 million head of feeder cattle from Canada and Mexico in 2014, and while the recent Cattle and Calf Inventory shows some herd rebuilding is underway, Moore says the cattle herd will expand more slowly than competing meats. Thus, the demand for lean beef via imports will continue if dairy and beef producers hold onto their cows.

Moore sees a continued trend toward consumers eating more chicken and pork, but noted that at $6/lb retail average for 2014, beef consumption in 2014 slipped by 4 pounds to 52 pounds per person, compared with annual chicken consumption at 85 pounds per person in 2014.

The U.S. dollar is strengthening, which is having an impact on meat exports, but the value of exports has not changed much even if the quantity is down. The Russian sanctions have dropped U.S. meat exports there to zero, and Moore noted that will hurt the Russian consumers because "it's unbelievable how inefficient their farms are. They import over half of their food, but not from us now."

Meanwhile in China, Moore notes that over 40% of the arable land suffers from degradation and reduced capacity to produce food. He noted China is getting interested in beef imports and Viet Nam may soon surpass China in pork imports.

Meat Scientists Give Inside Look at Packaging Industry and Labeling *cont. from bottom of page 2*

Hormone Hotflash

Lawrence likes presenting folks with this hot newsflash on hormones: The difference in hormone levels between a 3 oz. serving of implanted beef vs. non-implanted beef equates to a blade of grass in a football field. "You'd have to eat 18,000 steaks to get close to the level of estrogen in one birth control pill: one," he adds. "If a plant or animal has lived, it naturally contains hormones. They stimulate cell division. They are the signatures of life."

Next time you meet a vegan…

Tell her the lipstick she's wearing -- along with many other cosmetics -- could not be made without beef tallow. Lawrence detailed the many products derived from the offal.

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Grid Marketing: How to Minimize Risk, Maximize Reward

by Sherry Bunting

Cattle value was top-of-mind as 175 producers heard West Texas A&M meat scientist Dr. Ty Lawrence during Cattle Feeders Day in Lancaster on January 27. The morning session focused on marketing, especially Grid marketing on a carcass basis.

"The Texas Panhandle is home to 3 million cattle on-feed in 125 feedlots. Only two sell live, and 90% of the cattle are now sold on the Grid," said Lawrence, adding that in the West, "Fats are all sold direct to packers. The auctions are for feeders and culls."

Lawrence found our feedlots very different, of course, and he learned live auctions still exist here, giving producers an additional marketing option if they know their cattle, the market, and the value of a good sort.

That detail aside, marketing cattle is an exercise in passing beef value straight through the fabrication floor from farm to fork, with the packer using the drop credit to run the plant.

Lawrence demonstrated the relationship between direct sales on a live and carcass basis: Live weight x $159/cwt or Carcass weight x $256/cwt (Jan. 23 pricing). He showed the value of 35 steers to the feedlot operator was right around $77,450, either way, as the live price x live weight virtually equaled the carcass price x carcass weight.

Selling on the Grid? Now that is different. Risks and rewards are transferred from the packer to the producer -- from the buyer to the seller. Lawrence showed examples of sales that would benefit and those that would not.

Grid marketing essentially rewards value in three key areas: hanging carcass weight, quality grade and yield grade. It starts with establishing a base carcass value -- the negotiated price -- and adjusting it for the individual beef value. It forces producers to be more in touch with the market-readiness of their cattle, what they buy as feeders, when they sell their fats and whether to sort some out for the auction, since we still auction fats here in this part of the world.

Using probabilities, he showed producers how to figure out the optimum point of sale for "your market's Grid." And he emphasized his "Top 5 rules of engagement" for selling fats on the Grid.

#1 Develop.

An "other than adversarial relationship" with one or more packers.

Lawrence urged producers to learn and understand the packer's business. "Ask what they need from you as a supplier, and understand what their customers are asking from them," he said, adding that packers get constant requests from retailers looking for a unique labeled beef item they can call their own.

Relationships are important, said Lawrence.

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Meat Scientists Give Inside Look at Packing Industry and Labeling *by Sherry Bunting*

At Cattle Feeders Day, Dr. Ty Lawrence talked candidly about what affects value beyond the feedlot. He worked in the packing industry before coming to West Texas A&M University to head up the Beef Carcass Research Center, which collaborates with other universities and the industry to improve the quality and yield of red meat. Penn State meat scientist Dr. Jonathan Campbell talked about understanding labeling.

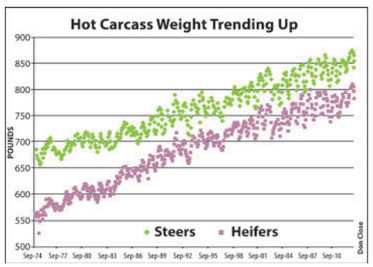
Here are some highlights:

Shrink up?

Lawrence said his weight studies show the typical 3 to 5% estimated shrink in most cattle buying equations is actually low. "The reality is two or three times that," he said. In his travels to both U.S. and Canadian feedlots, he found mud on the hide can weigh as much as 100 to 200 pounds!

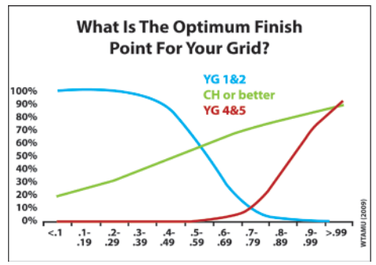
Gettin' heavy

Lawrence: "Carcasses are steadily getting heavier: 900 to 1000 pounds could fast become average." Heavyweight discounts are smaller, and the threshold is moving up. Heavier carcasses dilute the costs of running a plant -- particularly the significant labor costs. Fewer cattle and larger carcasses are the trend. While cattle numbers are tight, lighterweight carcasses see more discount pressure.



What if they could all be Prime YG 1's?

At the West Texas A&M Beef Carcass Research Center, Lawrence is involved in a cattle cloning project. He noted how rare it is to see a Prime YG 1 (0.03%), and he began to look at cloning one "to see if this phenomenon can be repeated and if we can capture the genetics to improve the beef industry." Stay tuned.



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Grid marketing: How to Minimize Risk, Maximize Reward

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In the fine print of the Grid is the fact that the producer pays for mistakes -- his and theirs. Improper live cattle handling at the feedlot, during transport, or at the plant can lead to costly bruises and dark cutters. Poor workmanship in how that carcass is handled before it gets to the cooler can lead to excessive trim losses.

Having a relationship with more than one packer allows the cattle supplier to see performance in different plants. This, plus #2 below, helps the seller talk with the buyer about on how to avoid trim losses in handling at both the feedlot and the plant.

#2 Know your cattle.

Know, with some confidence, how they may perform in the grading cooler. Lawrence urged producers to build up and keep their cattle history.

"Unknown cattle are a big risk," he said. "If you have no idea how they will perform, don't sell them all on the Grid." On the other hand, selling some cattle on the Grid helps the producer build up a history to find that confidence in selling on the Grid.

The conversion of cattle to beef is a pass-through. "The drop credit -- the hide, head, heart, lungs, all of the offal -- is running the plant," Lawrence explained. "The beef is a trade, a wash. Some weeks in 2014, packers paid more to fabricate cattle than they were worth. There's a whole lot of labor involved in the middle of that equation."

In Grid marketing, the packer's customer is now the cattleman's customer, and several influencers determine how each individual animal converts on a carcass basis:

1) Fill / dressing percentage
2) Degree of muscling
3) Degree of fat
4) Sex of the animal
5) Age of the animal
6) Condition of the animal

"The base price is what you negotiate," said Lawrence. "That price is the majority of the value. The Grid then applies quality discounts or premiums, yield discounts or premiums and weight discounts."

#3 Sorting is key!

Lawrence urged producers to learn how to sort cattle when they are received as feeders, at re-implant and a few weeks prior to harvest. "You have to do #3 to accomplish #2," he said.

#4 Crunch the numbers and know the Grid.

By managing the distribution and number of cattle types in the feedlot, the operator knows where they are, when to move them and how to market them. "Also know your Grids," said Lawrence. "If this area of the country gives top premiums for quality, make sure you also know how the yield grade 4 discount affects the net value of that premium on that Grid."

#5 Understand the market.

By knowing the historical trends and knowing the market the cattle are being sold to, the cattle feeder can then "buy cattle with the sell in mind," said Lawrence.

Meat Scientists Give Inside Look at Packaging Industry and Labeling

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Prime rib isn't Prime

Lawrence: "Prime rib is a name reflecting how the beef is cooked and has nothing to do with the quality grade. Most likely it's a no-roll or Select."

10-second yield

Lawrence showed cattle feeders all the visual observations and mental math in 10 seconds per carcass to determine preliminary quality and yield grades. Graders do this every day, all day, and they have correlations with other graders once a month to improve consistency. Automation is beginning to assist plant grading for improved accuracy at faster line speeds.

Consumer confusion?

Campbell: "The number of branded beef programs has multiplied significantly, with an increase in "rearing scheme claims" aimed at differentiating how a brand is produced. Organic is standardized, but other niche schemes are vague."

Retailers want to differentiate themselves with unique branded products. Meanwhile, consumers confess to being confused at the meat counter -- spending 30 to 40% more time at the meat case than at any other part of the store.

If a brand-name is approved, it can convey a claim that a label cannot. For example the "Lean" in Laura's Lean. Certified Angus Beef is a label claim with criteria, but the Swift Black Angus brand is a registered name so it is not viewed as a claim, but rather a marketing tool.

Natural label claims are left up to consumer to infer the facts, and the Grass-fed definition is also vague, allowing cattle to be fed grain-producing grasses and forages as long as they are not in the reproductive state at harvest (silages).

Chain reaction

All of these labels and brand names are trying to meet a targeted consumer. Lawrence said retailers tell packers: "Give us new and unique items." What follows is a chain reaction of beef-producing criteria for niche products, differentiated brands in the meat case, vague labeling, and consumer confusion. Does this increase or decrease overall beef sales?

USDA Tender

USDA Tender is an emerging label that can open markets for mature beef of higher quality. According to Campbell, the "white fat" cows and quality beef animals that fall outside of the A-maturity, but have a youthful meat color, can qualify for the USDA Tender stamp by meeting a standard for mechanized shear force testing. "The quality grade stamp with its official age and marbling standards is separate from the new USDA Tender and Ultra-Tender," he said.

BQA stamp

The PA Preferred label suffered a double-whammy. Not only is it a geographic label requiring USDA approval, the BQA-approved stamp inside the Keystone changed the perception from a national BQA to a state BQA. Campbell explained that BQA is a "rearing scheme" where certain management processes are certified by the program. The Pennsylvania Beef Council has been working with USDA to walk them through the BQA program so future labels can be approved. Marketing claims can be made in literature, without it being on the label.

Zero tolerance

From food safety to humane slaughter, zero-tolerance standards are changing the dynamics of beef processing and value. The large packers implement the latest technologies, spreading the cost over more cattle. Centralized restrainers and pneumatics improve the speed and accuracy of the stunning process in a timed progression.

In food safety, plants are implementing sanitation strategies for preventing the transfer of bacteria from the gut to the meat during evisceration and hide-pulling. Some examples at the plant level are hide-on carcass washing, steam vacuuming and organic acid sprays, while at the feedlot level vaccines and probiotics deter the growth of certain E. coli strains.

Livers and lungs, hides and tongues

Lawrence noted that cattle tongue is the # 1 export in value, second only to hides, which are the largest part of the packer drop credit. Liver and lung condition also affect the packer bottom line. The feedlot operator can help reduce liver abnormalities with good bunk management and can increase both value and performance by treating and preventing respiratory problems that permanently scar the lungs. Studies show those losses range 23 to 54 pounds in carcass weight. "Those are real dollars," he said.

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Benefits of Implanting

"There is nothing that pays better than implants," Homer Eberly, Agri-Basics beef nutritionist based in Stevens, PA tells his customers. He sees a lot of implanting in the Ephrata area and finds nothing in the beef industry that gives a better return on investment to producers than implants.

"As a rule of thumb, figure you will get an additional half-pound per head per day gain," Homer says. That means a 100-day implant will put 50 pounds more on a steer than the same animal without an implant. "I've been doing this for 25 years and I've seen that same improvement in average daily gain time and again," he says.

Amanda Butterfield, Pennsylvania cattle specialist with Merck Animal Health, agrees. "Depending on the stage of production, whether cow-calf, stocker, or feedlot, an appropriate implant program can return $40 to $200 per animal," she says.

In suckling calves, research shows that weaning weight is increased by 20 lbs. when implanting calves while on the cow. The economic value of implanting suckling calves in today's market results in a net return of $48.50/head on a calf market of $2.50/lb., according to Butterfield. Implanting suckling calves results in a significant economic return for the producer who sells calves at weaning.

Weaned cattle either grazing forage or confined and fed a growing-type ration and implanted have been shown to increase weight gain by 25 lbs. and improve feed efficiency by 10-15%. The economic value of implanting weaned calves in today's market would result in a net return of $54.25 on a feeder cattle market of $2.25/lb.

WHY THEY WORK

Implants increase protein deposition, Butterfield explains. Increasing protein deposition enables the animal's natural metabolism to more efficiently convert feed to protein (muscle). "Increased protein deposition leads to increased weight gain and improved feed efficiency," she says.

Research indicates that the implant response is due to a combination of a reduction in the amount of feed required for maintenance, reduced energy content of gain (more protein vs. fat), and improved efficiency of use of absorbed feed energy. These effects allow the animal to utilize the nutrition it is offered more efficiently without increasing metabolic needs.

> *"Implanting suckling calves results in a net return of $48.50/head on a calf market of $2.50/lb."*

For this reason, Butterfield notes, implanted cattle can be fed the same as non-implanted cattle.

A number of implant programs can be used in cattle from birth to slaughter. There are over 25 implants available to producers and not every implant is suitable to every situation.

Feed company personnel, nutritionists, veterinarians and university personnel can help producers with advice on the appropriate implants to be used at each production phase.

"The magnitude of the overall response to implants in beef production may be influenced by the implant used, the length of time between implant periods, and the plane of nutrition the animal has available," Butterfield says. Generally, the response to an implant will increase with increasing hormone dose, decreased time between implants, and increased energy available to the calf. However, positive responses have been demonstrated when implanting calves grazing low-quality winter range.

OTHER KEY FACTORS

One key to success has nothing to do with implants, themselves. "Money spent on a head gate and chute is money well spent," Homer declares. "Implanting is not that big a job if it is done with the right facilities."

Eberly finds that most producers who give up on implants are those who do not have the proper handling setup and become frustrated trying to get the actual job done. "Cattle are just too big to push around," he says with a grin.

Some farm publications warn about grading issues with implants. In some areas, grading can be a problem – but usually not in Southeast Pennsylvania. Much of it has to do with the way local producers feed out steers.

"We buy our cattle lighter here in the Lancaster County area," Homer says. "And we keep them longer on feed."

Problems typically arise when a producer gets 9-weight cattle and puts them on a hot feed ration for 100 or 110 days. "We do better buying 6- and 7-weights and feeding them over 200 days," Homer says. "Bring in a lighter steer and keep it on feed for longer and there is no need to shy away from how they'll grade."

"Properly used, tools such as implants can help increase profitability of a beef operation," Butterfield says. For more information, she can be reached at 765-730-9302.

Beef Can Expect A Mini-Boom

The animal industries finally have a positive multi-year outlook, according to Purdue University agricultural economist Chris Hurt. The favorable income prospects are based on feed prices re-setting to lower levels, continued reductions in drought affected pastures, and strengthening domestic incomes.

Animal industries will be in a "mini-boom phase" in coming years, Hurt expects. The mini-boom will be led by rising per capita consumption, continued small growth in U.S. population, and growing export demand. A determining force of how big the boom will be will depend to what level feed prices re-set.

The three important causes of declining per capita consumption are shifting from negative to positive. Feed prices are much lower, drought continues to abate in the Southern Plains, and the U.S. economy continues a slow but steady process of bringing more families back into the work force. All will help mid-Atlantic producers.

Much of the 20 pound per person reduction in meat consumption will be recovered in coming years. How much depends on the magnitude of the changes in the drivers. As an example, 219 pounds of meat consumption per person was based on a period when corn prices averaged about $2 a bushel and soybean meal $200 a ton. As feed prices re-set in the coming era, few believe feed prices will drop back to those low levels. Given current expectations for future feed prices, a recovery of 10 to 12 pounds of the lost 20 seems like a reasonable estimate. This means a recovery from 199 pounds to near 210 pounds.

Hurt says high grain prices from 2006-2012 led livestock farmers to downsize herds to cover the extra feed expenses. The price of livestock products increased, fewer meat products were available on the market, and consumers began to eat less meat. So this year, prices are at record highs for cattle, hogs, poultry, milk and eggs. With record-high animal prices and now much lower feed prices, profit margins for the animal industries have risen to strongly favorable levels, Hurt says. Profit prospects have these industries ready to expand.

"If the years from 2007 to 2013 could be described as the 'Grain Era,' in which crop sector incomes had an extraordinary run, the coming period may be described as the 'Animal Era,' when producers of animal products have strong returns," Hurt says.

Rising per-capita consumption of meat will also be a driver in this mini-boom phase, since animal products will become more affordable, Hurt said. As an example, the amount of meat available each year reached about 220 pounds per-capita when corn was $2 a bushel. By this year, only 200 pounds is available.

"We can expect that a portion of this lost consumption will be recovered in the next three to five years as producers increase supplies and drive down retail prices of animal products for consumers," Hurt says.

This positive period for animal agriculture will also be economically good for rural communities and businesses that carry animal management supplies. "The animal industries finally have a positive multiyear outlook," Hurt concludes.