



# The GAR REPORT

January 2002

PROUD TO BE A FOUNDING MEMBER OF U.S. PREMIUM BEEF®.

Editor's note:

*This issue of the GAR Report will focus on carcass quality, managing cattle to an end point and optimization.*

*Thanks to Troy Marshall for allowing us to reprint an excellent article from his weekly Seedstock Digest.*

*Mark Gardiner recently contributed an article published in BEEF Magazine discussing the importance of knowing the end product. We have reprinted the article.*

*We also would like to thank U.S. Premium Beef® for granting permission to reprint timely information regarding carcass quality and grid changes.*

*Plan to join us at 9:00 AM, April 6, 2002, for the 23rd Annual Gardiner Angus Ranch Production Sale.*

**"Through U.S. Premium Beef® in 1999, 2000 and 2001 GAR customers received \$720,880 or \$60.07 more per head over cash market for their cattle. For every 100 head of GAR influenced cattle selling through U.S. Premium Beef®, our customers received an additional \$6,007!"**

Since 1885



If you have industry related questions or specific issues that may be addressed in the GAR Report, please submit to:

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## Is end product important? Or... yeah, whatever.

*Previously published in BEEF Magazine —Written by Mark Gardiner*

I graduated from Kansas State University in 1983 with a degree in Animal Science. I was brimming with confidence, and full of knowledge when I came home to change our ranch for the better. Upon arriving home I began to make all of the mating decisions for our cow herd. We use a total AI program and have always had a genetic selection philosophy of breeding for as many pounds as possible, provided we can produce those pounds in the correct package.

During my first year of making the breeding decisions I found a bull that, at that time, produced the most pounds that we had ever seen. This bull sired calves with an acceptable birth weight, and explosive growth in a moderate-framed package. My father had collected carcass data on all of our steers since 1970, but we had not gathered any carcass data on this sire yet. Since arriving home from college I had repeatedly tried to impress upon my father how stupid it was to gather carcass data when no one paid for it. He would only smile and say, "We are producing seedstock, and we need to know what our end product is." I, on the other hand, would mutter (under my breath) about how backward it was to gather this information without receiving any money for it.

To bolster my case against the need for gathering carcass data I would occasionally remind Dad about the bull that we had earlier identified who was the best marbling bull of the Angus breed. This bull had the ability to raise the quality grade of his progeny by a full two-thirds of a quality grade. That was the early days of Certified Angus Beef (CAB), and the only "grid marketing" of the time was to sell cattle through "grade and yield" However, at the time there were no premiums for CAB. I reminded my father that this great "CAB Sire" was a bull that we could not afford to use because he did not have enough growth, he was a negative maternal sire, and his daughters had horrible udders. "Dad you know it

doesn't matter how well a sire does for one category if he fails in several others," I said. He smiled and reminded me that this was just one sire and that we still needed to know the end product potential of all of our sires. My response, "yeah whatever." At the time I was into pounds, regardless of the composition of the pounds, because that was what we were paid for.

What about the bull I thought, at the time, was the best ever for producing pounds in the correct package? Let's call him "Super Sire." This sire's calves performed tremendously in the feed yard attaining our highest average daily gain, lowest conversion rates, and the cheapest cost of gain in Gardiner Angus Ranch history. However, when we obtained the carcass data on the progeny of "Super Sire" there was a bit of a different story. The first year there were 44 steers in this sire's progeny group and 14 of those steers were yield grade 4. You might conclude that we fed them too long, however they were only on feed 98 days. Of the 14 steers that had a yield grade 4, 11 graded Select. What Mr. Mark "stupid" Gardiner had done was to identify the sire that was a trait leader for the Angus breed for negative marbling, negative muscle, and positive for fat. There was no correct time to have ever harvested these steers because they did not have the correct genetics to hit the target.

After this little episode my "smarter" father smiled and said "Mark, now do you see why we need to know our end product?" I ate my humble pie, and quickly my empty feeling became worse, because I realized that we had 36 more steers by the same sire in the following year's calf crop. I had also been on such a "roll" in sire selection that I had used an unproven son of "Super Sire" and there were 10 other steers sired by that bull.

This learning experience was painful, however, it helped me to understand how important it was for me to consider the "composition" of pounds or what we have come to call

# Data is only as good as the analysis — using carcass data to improve quality.

by Brian Bertelsen, Director of Field Operations, U.S. Premium Beef®

## Editor's note:

The following article is reprinted with permission from U.S. Premium Beef®

During fiscal year 2001, USPB once again collected individual tag transfer or "complete" carcass data on many cattle our members marketed through the company. This information is extremely valuable to the ranchers that produced these cattle.

Identifying each calf and relating it back to a specific sire and dam is the ideal way to get the most out of carcass data. Herds that use multiple sires per breeding pasture can still increase their rate of genetic improvement by relating calves back to the individual cow. These individual cow records can then be used as a culling and selection tool.

"What do I do first?" Anyone can skim down a set of carcass data and find the small percentage of carcasses that were discounted. Going through your data line by line, one carcass at a time, will help you better understand the grid, your data, and your cows. But, to fully utilize individual data, a computer is invaluable. Commercial software programs are available, but simple homemade spreadsheets can be built that also work very well. Plus, you have more flexibility in a spreadsheet you make yourself. If you want a new report, just create it.

I recommend that you sort your data into groups. First, summarize contemporary groups. A contemporary group is made up of calves of the same sex that were managed alike. This means they grazed together, were placed on feed together and were harvested on the same day.

This is important to measure environmental effects. You will then see if management or environment affected their carcass performance. For example, if one group was fed longer, or if one group grazed better grass, or if they received different implants, it would skew the data.

If possible, summarize all calves sired by each bull (or bull groups in a multiple-sire pasture mating system). Then, sort by cow groups. Sort by age, breed and sire of cow. Look for patterns in the data. Occasionally, you find a link such as daughters from one bull with a significantly higher or lower average for a trait. That bull may have been used years ago but his genetics are prominent in his daughters. Cow families can also be helpful. For example, calves from an older cow and her three daughters. Or all calves with the same maternal granddam.

Ranking is also effective. Literally rearrange the carcass data from most desirable to least desirable for each and every relevant trait. Actually make notes about the cows in the top 30% and the bottom 30% for each trait. I call these "stars" and "strikes". Keep heifers back from cows with a lot of "stars" in her production record. Cull cows after a given number of "strikes".

After several years of data are collected you can summarize individual cows. Be careful to separate environmental and management influences that can make a cow's calves look better or worse than their genetics. Removing environmental effects allow us to better estimate true genetic differences. Be aware of effects from sex of the calf. It is best to compare within a contemporary group.

**What traits are important?** Reproduction and growth traits have the greatest effect on ranch profits. Carcass traits are less important in relation to those, but look at your carcass data and you will see that there is still tremendous potential for improvement. If you replace a poor cow (bottom 30%) with an average replacement heifer you usually increase your gross income by about \$125!

Within your USPB carcass data, pay close attention to the "carcass value" column. It's not rocket science—keep heifers from the cows that produce more gross income and cull cows that consistently produce less. Remember not to sacrifice reproduction or calving ease. However, total carcass value combines carcass weight and carcass quality into one effective, easy-to-understand index.

The problem with total carcass value is the impact of changing grid inputs. Within one year, or between years, inputs like the base price and the Choice/Select spread can drastically affect the carcass price per cwt. Therefore, I recommend using "standardized carcass values".

Standardized carcass values are used to recalculate the carcass value per head using the actual carcass weight but a constant price/cwt for each quality grade/yield grade combination over all harvest dates. For example, a Choice, Yield Grade 3 is always worth \$108/cwt. A Select YG 2 might always be worth \$101/cwt. These standard values would be used across all delivery groups over all years.

This allows you to summarize progeny from a cow or bull, over years. Then it becomes clear which ones are consistently producing calves with more (or less) valuable

carcasses. If you would like a copy of some recommended standardized values, please call me at 866-877-2525.

**What data is most relevant?** Carcass value is affected by carcass weight and carcass value/cwt. Quality Grade (marbling) is the single most important factor affecting carcass price on the USPB grid. Therefore, summarizing quality grade and/or marbling scores will allow you to select genetics that produce a higher (more valuable) carcass price per cwt.

Yield grades have a smaller effect on the USPB grid, but are extremely valuable in evaluating overall carcass merit. Keep in mind the physiological changes that occur while cattle are on feed. Both marbling and external fat will increase with added days on feed. Genetics will influence where the fat is deposited.

**Watch the relationships**—YG 1's & 2's that are Choice or higher are very desirable. Select, YG 4's & 5's are very undesirable. These cattle had the opportunity to deposit plenty of fat, but most of it was external fat, not marbling.

Don't be too quick to cull a cow that produces a YG 4, Choice or higher carcass. Even when sorting, we still deliver semi loads to the plant. Plus, there is a large incentive on the USPB grid to feed cattle to a fatter endpoint. Don't send that cow to the sale barn just because one of her calves was harvested a little too ripe. If she does it repeatedly, that's a different story.

Ribeye area (REA) is also important. Selecting for cattle with more muscling will increase carcass weights, reduce YG 4's and improve dressing percents. The REA should be compared to the hot weight. Calculating REA per hundred pounds of carcass weight is valuable. In the yield grade equation, carcasses with a REA/cwt. of hot carcass weight of 1.65% are considered "average". However, as carcasses become fatter, this ratio will decrease. I recommend that you cull off your lighter muscled genetics first.

**Go slow when culling.** Although individual carcass data is valuable, be careful not to over-react. Culling cows after one year of carcass data is not recommended—especially when individual sires are not known (multiple sire pastures). The cow provided only half of the genetics of that calf. Don't condemn a cow when it may have been the bull's fault.

**Or it may not have been genetics at all.** If a heifer is harvested while she is in heat and becomes a dark cutter, don't blame the parents. If the calf got sick and didn't grade it

might not be the cow's fault unless it gets sick repeatedly. If a cow's calves repeatedly get sick it might be from a repeated lack of colostrum at birth.

Also, watch out for effects from older or younger calves. Sometimes a calf's carcass value will be influenced, either positively or negatively, by his age. Take this into account when estimating true genetic merit.

USPB members can still get individual carcass data at no charge. Remember to request option 1 (basic tag transfer) or 2 (complete) on Form B when scheduling. You may need to remind the custom feed yard prior to scheduling.

Electronic (EID) ear tags are recommend-

ed. Members can purchase EID tags from Farmland Animal Health for \$3 each. If members send in a copy of their invoice, USPB will rebate \$1.50 for cattle delivered through 2002. Call Kim Lamanske at 800-334-2394 to order tags.

If you wish to analyze your data on computer you may want to request an electronic copy of your data. USPB can now send an Excel file via email upon request. Call our office for more information.

Portions of this article were taken from "Utilizing Carcass Data to Improve Genetics" in the USPB Producer Manual. Copies of the complete manual are available at no charge to USPB members. Just call 866-877-2525.

## There is a feed yard that fits your operation

Over 5 million (5,000,000) head of fed cattle are marketed each year in the state of Kansas. There are 100-150 Kansas feed yards that finish cattle with average capacities ranging from 20,000-30,000 head. Feed yards are rapidly implementing systems designed to accommodate all producers, regardless of size or end point of the cattle.

The most common response small producers is "I never have enough cattle to fill a pen or a load". Today, that argument just doesn't "hold water"!

Value-based pricing systems, such as U.S. Premium Beef® are designed to pay producers based on INDIVIDUAL performance. Through the use of Electronic Identification Devices (EIDs) and other state-of-the-art technology, feed yards are managing and sorting cattle for a range of grid formulas and end points.

Gardiner Angus Ranch genetics are marketable in virtually all value-based systems. Since 1999, 12,000 head of Gardiner influenced cattle have sold through U.S. Premium Beef®, totaling \$720,880 in cash and premiums for an average premium of \$60.07 per head. We know WHAT Gardiner Angus cattle will produce. Having feed yard and marketing relationships with operations that know HOW to manage and feed Gardiner cattle to the optimum end point is imperative.

One such operation is Sam Hands, Triangle H Grain and Cattle, Garden City, Ks, a long time customer, friend and business associate of Gardiner Angus Ranch. Although Sam is a commercial cattleman, Triangle H is also a feeding operation with years of experience. Triangle H is a leader in sorting cattle for opti-

mum end points and collecting individual feedlot and carcass data. All cattle are marketed "on the rail."

"Most all of our cattle are 'ranch fresh' from known genetics. From developing and testing GAR bulls, working with their customers to sort and feed their cattle, our relationship with Gardiner's is a win-win for us both," says Sam.

Another feedlot partner is Irsik and Doll, Cimarron, KS, a diversified feeding operation consisting of five locations and a combined one-time capacity of 170,000 head. Named by **CERTIFIED ANGUS BEEF®** as a Cattle Feeding Partner of the Year for 2000, Irsik and Doll offers a full complement of marketing options including financing of the cattle, daily scheduling with four major packers, complete data collection and formula feeding for all value-based pricing systems. Producers can follow cattle by pen or individually, through a password protected, internet accessible central database servicing all five feed yards.

HRC Feed yard, Terry Ryan, manager, Scott City, KS, is yet another certified U.S. Premium Beef® feed yard with an excellent history of feeding GAR cattle.

The bottom line — there is a feed yard right for your operation, regardless of size. Genetics, herd health and ranch management are the fundamental requirements for a successful feeding experience resulting in profitable cattle that return a premium.

For further information, contact GAR or:

**Sam Hands (Triangle H) • (620) 276-6546**  
**Ron Cramer (Irsik & Doll) • (620) 855-3111**  
**Terry Ryan (HRC Feed yard) • (620) 872-5328**

## Is end product important? Or...yeah, whatever (cont.)

"pounds in the right package." Without end product information, I would have continued to select these cattle, and probably would have created a herd of the most inferior carcass genetics in the history of the beef industry.

Fortunately, I have never forgotten this lesson that I learned some 15 years ago. In fact, this helped me to focus on ALL of the traits that beef cattle need to have to be successful. I was allowed to keep my "job" of making all of our ranch's mating decisions. One other thing I learned from this episode and am reminded of everyday: the older I get the smarter my dad gets.

# USPB Announces Grid Changes

by Steve Hunt, CEO, U.S. Premium Beef®

Having a competitive value-based pricing mechanism to market cattle every week of the year is one of the fundamental benefits of participating in U.S. Premium Beef®. With that commitment to our members in mind, USPB is once again making improvements to its grid.

The net effect of these changes is the single largest increase in USPB premiums due to grid changes to date. Effective on cattle shipped the week of November 19, the following changes have gone into effect:

- Hot Yield used to determine Base Hot Price changes from the Farmland National Beef (FNB) Kansas
- Non-formula Weekly Plant Average to the FNB
- Kansas Non-formula Weekly Plant Average or 63.5%, whichever is lower
- Choice or Higher Threshold drops from 52% to 50%
- Ungraded discount increases from \$5.00 per cwt. to \$8.50 per cwt.
- Lightweight Discount Threshold moves from 550 lbs. to 575 lbs.
- Heavyweight Discount Threshold moves from 975 lbs. to 1,000 lbs.

Capping the plant average hot yield at 63.5% will immediately increase USPB's base price. It will also reduce the influence that cattle purchased on the spot market have on establishing USPB's base hot price in the future.

Lowering the Choice or Higher threshold to 50% will increase the number of pounds of Choice beef qualifying for the Choice/Select spread premium. This will increase premiums paid to members delivering higher quality beef.

Adjustments to the Ungraded discount were made to better reflect the market value of carcasses that fall into this category. Our grid historically has discounted Ungraded cattle less than the industry as a whole. This move will send market signals that reflect consumer desires.

It has always been USPB's philosophy to have our plants run as efficiently as possible. The twenty-five pound shift in acceptable carcass weights will be an incentive for USPB members to deliver carcasses whose increased weights provide for more efficient plant utilization. We believe this change will serve our members even more when our industry begins heifer retention and members have a need to deliver more steers during the next few years.

**Plan now to join us Saturday, April 6, 2002, at 9:00 AM for the Gardiner Angus Ranch 23rd Annual Production Sale.**  
**Selling 900+ head, including 400 bulls and 525 females.**

# Have we gotten the wrong message about optimization?

Editor's note:

The following article is reprinted with permission from Troy Marshall's weekly publication of *Seedstock Digest*. *Seedstock Digest* has become one of the most informative and timely newsletters in the industry today.

Have we gotten the wrong message from all of the talk about optimization? In the December issue of *The Farm Journal*, they had a feature article about Francis Childs from Manchester, Iowa. Mr. Childs set a new world record by producing a corn crop that yielded 408.22 bu/acre. To accomplish this type of yield he applied every known technique to improve yields from fertilizers to newly invented planters. The article mentioned that most people dismiss these type of yields off-hand. They question the effect that these type of yields could have on the market. Plus, they argue that they are impractical, to farm that intensively requires too much time, inputs, management expertise, and time. Simply, large yields are impractical when applied to large-scale agriculture. Granted, these arguments are probably valid. But Mr. Childs has shown that these type of yields can occur while actually improving the soil and not harming the environment. And other farmers are implementing some of the techniques that he has pioneered and developed in the pursuit of record yields.

The cattle industry has embraced optimization with the realization that only one thing needs to be maximized on an operation — profit or enjoyment. Producers rarely brag about record weaning or yearling weights anymore. The show ring is no longer a place for the extreme ends of a population but rather is about displaying animals with a balance of economically relevant traits. Optimization represented a great change in producer mentality and has led to increased profits and it has

taken on new and increased significance as producers begin to look at cattle production from a total systems approach. However, I wonder if at times we have not accepted optimization as an excuse for not making progress. Often times, the strongest proponents of optimization will tell you that they do not need additional growth, additional muscle, additional marbling or additional anything. They argue that their cattle are optimum right now that the goal is merely to propagate more of them, and of course from a marketing standpoint they then must set out to discredit any genetics that does not match their status quo as not being optimum. Even if they have the animal that represents the absolute optimum today, it will not be the optimum animal down the road, because someone will come up with an animal that converts forages more efficiently, calves easier, breeds back quicker, milks harder, fleshes easier, grows faster, grows more efficiently, grades better, yields better, and breeds truer, while maintaining fertility, mature size, etc...

Producers should embrace optimization as long as it is under the encompassing goal of continuous improvement. From a genetic standpoint, the goal has been and always will be to find those genetics that defy genetic antagonisms. It is a dangerous thing for a commercial or seedstock producer to stop striving for improvements. It is not difficult to find breeders that will tell you that all they had to do is maintain the right breed composition and percent blood in their cows, or that reproduction, birth weights, milk, growth, carcass, efficiency, etc., are all just right in their cows. The implication is that if they improved in anyone area that it would inevitably destroy the balance. Admittedly, more is definitely not always better. Limits and thresholds exist for all sorts of traits, and when one assigns selec-

tion pressure to traits, certain populations may be so acceptable in certain areas that they can be ignored in essence. However, it should not be used to justify the status quo. The same principles hold true for management. Management is always striving to improve efficiency and to alter the balance in favor of results relative to inputs. But whether one is contemplating genetics or management the one thing that must be embraced is that what is optimum today, will be inadequate in the future. The free enterprise system and competition dictates that if genetics and the management applied to those genetics is not constantly striving to improve that they will be left behind by those who do.

## Nelson Farms Production Sale Scheduled for February 15, Alma, Nebraska

Long-time friend and colleague, Terry Nelson, Nelson Farms, Long Island, KS, will sell over 1500 proven commercial Angus females. The females, all 2 to 6 years of age, are from Gardiner bulls — sons of N Bar Emulation EXT, DHD Traveler 6807 and GAR Precision 1680. In addition, the offering will include 60 service age bulls — mates to the proven females that sell.

Nelson Farms is extensively involved in cattle feeding. The females selling are proven producing cows whose calves have excelled in the pasture and on the rail.

Nelson Farms calves sold through U.S. Premium Beef® have averaged \$35 to \$75 per head premium, depending on the weekly Choice/Select spread.

If you are in the market for young producing females from proven GAR genetics, be in Alma, NE, February 15.



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