

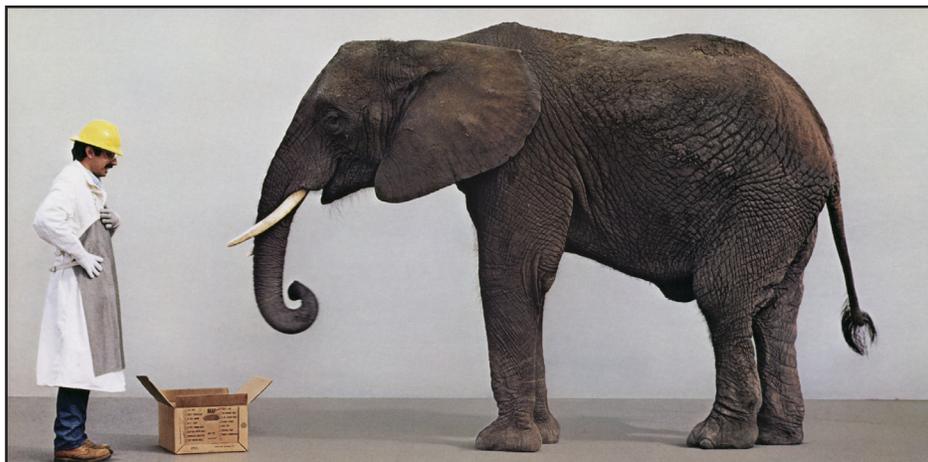
Is the Angus Breed on the Right Course?

A MARC Update By Dr. Bob Hough

The American Angus Association (AAA) must be admired for always supplying their breeders with industry-leading selection tools. Let's look at what they have accomplished over the years. In 1956, they started a performance program which led to collection of weaning weights in 1959—first among any major breed and second only to Red Angus, who started an association with a handful of breeders in 1954, based on performance. AAA started a carcass program in 1962, which led to 1972's National Sire Evaluation Program and eventual carcass EPDs. No breed association would ever come close to AAA in quantity and quality of carcass data from that point forward. They started releasing a genetic evaluation (EBVs) on sires that had gone through structured tests in 1974, and in the fall of 1980, with the guidance of Dr. Richard Willham of Iowa State, AAA led the industry by releasing EPDs on bulls whose data was derived from the field instead of structured tests. They then made the jump to EPDs on the entire herdbook in 1987.

AAA blazed a path for the industry when they, in conjunction with Iowa State, developed ultrasound to test live animal body composition traits, culminating in the publication of the first ultrasound EPDs in 1998. At the turn of the century, I was pleased to work with Iowa State, AAA, and eventually the Charolais Association to design and implement the Ultrasound Guidelines Council when it became apparent we needed an organization to test field and lab technicians as well as software for certification for use in the industry. AAA always had more EPDs than any other breed, so in the 21st century they added dollar indexes in an effort to simplify the selection process. More recently, they have again led the industry by developing genomically enhanced

EPDs. Instead of making the mistake of printing another EPD, all data for a certain trait is put into the model—carcass, ultrasound, DNA—to come out with a single EPD. Lastly, they are doing what no other breed association is capable of, and that is running a weekly EPD run for all traits. All in all, quite a track record of success.



Why packers don't want to box elephants.

Let's face it, elephants just don't fit today's assembly-line society. They don't fit the beef packer's boxes. They don't fit with the other cuts in the display case. They don't fit the uniform product restaurants want to serve.

Today's packer does not believe bigger is better. To him, an ideal animal weighs between 1,050 and 1,200 lbs. and produces well-marbled cuts that look like they were punched from a mold.

That's the kind of animal you get when you add some Angus. Many elephant-sized breeds must be fed to 1,400 lbs. or more before they grade at USDA

Choice. Not only is that inefficient, those elephant-sized carcasses don't fit the packer's system. So he pays less per pound for elephants, if he buys them at all.

No breed reaches the ideal 1,050 to 1,200 lbs. faster or more efficiently than Angus. And Angus-cross cattle consistently reach that size at USDA Choice, with a yield grade of three or better.

Adding some black to your breeding program also reduces the calving problems, slow rebreeding and inefficient replacement heifers you get with elephants. In short, Angus are bred to solve problems, not create them.

You're in business to make bigger profits, not bigger animals. So count on Angus... THE BUSINESS BREED.

ANGUS
THE BUSINESS BREED

American Angus Association
3201 Frederik Boulevard, St. Joseph, Missouri 64501

What have Angus breeders done with all these tools? History would show that far too many breeding programs have been driven by "fads" that typically take traits to the extreme. I recall that when AAA came out with the famous "Elephant" ad campaign (above), which arguably was the start of Angus' dominance, Angus cattle were probably the biggest framed cattle in show barns. Unfortunately, it appears the extremes that used to occur in the showring are now being transferred to performance traits and indexes. In the mid-90s it was little calves at birth, then big testicles, high marbling, big ribeye, high Dollar Beef (\$B), and the list goes on.

Dr. Bob Hough recently served as executive vice president of the North American Limousin Foundation from 2009 to early 2011, and is now a consultant, freelance writer and semi-retired. Prior to '09, he was the executive director of the Red Angus Association of America headquartered in Denton, Texas for ten years.

Bob was raised in Pennsylvania where his family had a general livestock farm and received his undergraduate degree from Penn State in 1982. He went on to receive his M.S. from University of Connecticut and Ph.D. from Virginia Tech, all in animal science. His previous experience includes serving as an Extension specialist in both Arizona and Maine, and marketing coordinator for the Red Angus Association of America.

While Bob worked with the Red Angus Association of America, the breed grew from 12th to fourth largest breed. Bob developed the industry's first USDA Process Verified Program—Red Angus' Feeder Calf Certification Program. Bob also implemented Red Angus' carcass EPD program and negotiated value-based marketing grids with two major packers, the first of its kind in the industry. He was also involved in the design of the industry's first "Total Herd Reporting" program, which was implemented at Red Angus. Under his leadership, in 2002, Red Angus released the industry's first Reproduction Sire Summary. In 2004, at the Association's 50th anniversary, he was named one of the "50 Most Influential People of Red Angus."

Bob served on the board of directors of the Beef Improvement Federation (BIF). With BIF, he has also served on the Program Committee, served as chair of the Whole Herd Reporting Committee, been a *Guidelines: For Uniform Beef Improvement Programs* author, served as editor for the "Breeding Herd Evaluation" section of *Guidelines*, and in 2004, received the BIF Continuous Service Award. He was also one of the founding members and the first chair of the Ultrasound Guidelines Committee, which oversees certification of all ultrasound field and laboratory technicians.

Bob served as president of U.S. Beef Breeds Council, on the board of directors of the National Beef Cattle Evaluation Consortium and on the board of directors of the National Pedigree Livestock Council. He was inducted into the Maine Beef Industry's Hall of Fame and received the Red Angus Association of America's Distinguished Service Award. He has also written more than 200 scientific, technical, and popular press articles; wrote the book *The History of Red Angus*; coauthored *Breeds of Cattle* (www.breedsofcattle.net); been quoted in many national articles; and has been invited to speak on programs in 27 states, four Canadian provinces, Ireland, Paraguay, Bolivia, and Brazil. Bob has served on the steering committee for the National 4-H Livestock Judging Contest for over 20 years, and has judged livestock shows in 15 states, four Canadian provinces, Brazil, and Paraguay. He has traveled on beef cattle business to 49 states and nine Canadian provinces.



R.L. "Bob" Hough

Let's step back and remember what an Angus is supposed to do. Angus are moderate sized cattle which should be able to be backgrounded. Above all, they must be excellent cows with outstanding reproduction, longevity, low maintenance, and be trouble free and capable of weaning a calf that is a high percentage of their body weight. Angus should hang average size carcasses that will grade a very high percent USDA Choice with as few USDA Yield Grade 4s and 1s as possible. If they are high percentage Angus, I worry almost as much about the 1s as the 4s because the last thing a producer wants to do is put the heifer mates of Yield Grade 1 steers back in the herd, because they won't make good cows. Luckily, a core group of breeders has stayed true to these basic Angus traits. However, on the whole, the breed has definitely drifted away from its strengths.

Now let's see where the Angus breed is today based on the latest research. The breeders have definitely used the tools provided to them by the Association. The USDA Meat Animal Research Center (MARC)^a shows that Angus has annually increased weaning weight, yearling weight and milk faster than any other breed, but has also increased birth weight more than any other breed except Hereford, while in general, the Continentals have decreased birth weight. Angus is still the calving ease leader, but not by the margin once enjoyed (Figure 1). Despite this, from practical experience, Angus calves are widely known to have more vigor at birth than many breeds, which is extremely important to having a high percentage of live, healthy calves.

When the across-breed tables^b are converted^c, it reveals that Angus now has more growth than all breeds but Charolais and Simmental, which it closely follows (Figure 2). Growth is highly correlated to mature weight, and in the latest MARC Cycle VII^a data, mature Angus cow weight on a body condition score constant basis were larger than all breeds except Hereford. Bigger than all the Continental breeds including Charolais (Figure 3)! When you apply the across-breed EPD table, it shows that Gelbvieh has the most milk, followed closely by Angus, which were above Simmental and all other breeds by a good margin (Figure 4).

Figure 1

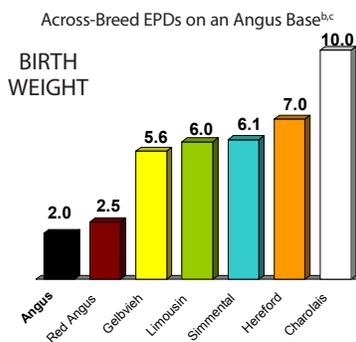


Figure 2

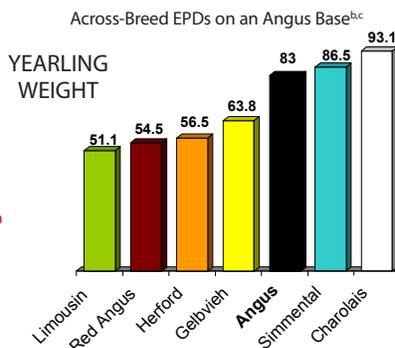


Figure 3

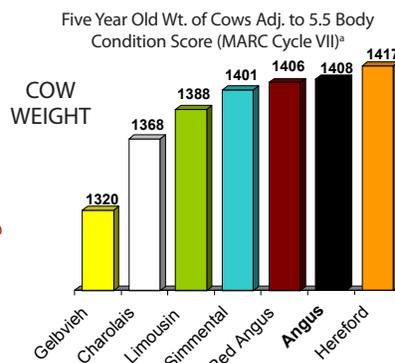


Figure 4

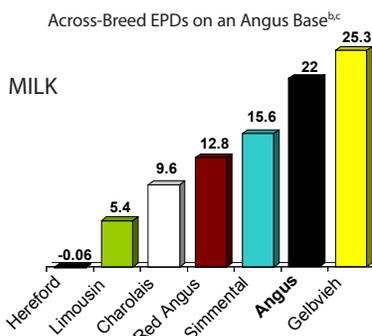
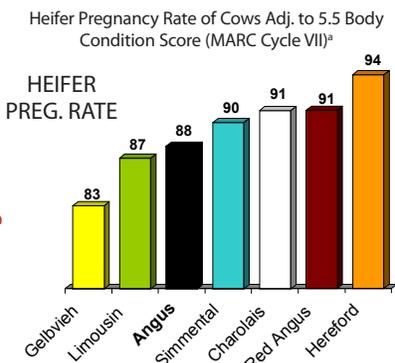


Figure 5



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Dr. Bob Hough

Maintenance requirements are a function of body size (actually surface), and visceral and organ mass. High milk cattle have conclusively been shown to have more visceral and organ mass which gives them higher maintenance requirements, whether they are lactating or not. Thus, with the average Angus cow's size and milk potential, the breed has become one with some of the highest maintenance-cost cows in the industry. The train is definitely off the tracks here, but there are herds that have not followed the fads of growth and milk. Does the Angus breed really need 100+ pound Yearling Weight EPD/high Milk EPD cattle, which seems to have become the norm for most high-use herd sires? Why is no one paying attention to \$E, the maintenance energy index? Again, luckily there is a large group of like-minded breeders who have stayed at home in terms of breeding Angus for what they are meant to be—medium size cows with milk adaptable to a wide range of environments and reasonable growth.

Angus have also always been known for reproductive prowess, yet the MARC Cycle VII data gave room for pause. Pregnancy rates of Angus yearling heifers trailed Hereford, Red Angus, Charolais and Simmental while being only one percent above Limousin, with Gelbvieh bringing up the rear (Figure 5). It is interesting that Gelbvieh reaches puberty earlier than the other breeds by a wide margin but has the lowest heifer pregnancy rate by a good margin. It goes to show that producers should use the heifer pregnancy EPD instead of the Scrotal Circumference EPD as a proxy to increase heifer fertility.

Another troubling statistic from the MARC data is Angus now produce the largest slaughter weights (Figure 6). With their growth potential, this means many Angus are no longer candidates to be backgrounded and must be calf fed. A couple examples of backgrounding are grazing calves on wheat pasture in Oklahoma or roughing calves through the winter and grazing them the second summer in the Sand Hills. Cattle with too much growth will end up with too many overweight carcasses if put in one of these systems, thus must be put on feed as calves to avoid overweight discounts. However, with grain prices of recent years, feedyards are looking to background as many cattle as possible to put on cheap gains before putting cattle into the lot; so average Angus possibly losing this ability is a big strike. We must question if Angus should have the extremes in Yearling

Weight EPD and frame creep we are witnessing today. Angus and Red Angus still stand out by a good distance from the other breeds in marbling score and percent Choice (Figure 7). Far too many of today's Angus seedstock producers are breeding cattle with high maintenance requirements, very high milk, lack of fertility, and an inability to be backgrounded because they are chasing too much growth. Commercial producers should be looking to Angus seedstock operations for bulls that have stayed true to basic Angus traits. These would moderate mature size, milk within reasonable bounds for their environment, and growth low enough that cattle do not have to be calf fed.

What has gone wrong with Angus, which has been shown to be the industry's greatest single breed? Again, it goes back to fads. For example, there are many breeders currently fixated on \$B and ribeye area. \$B is a terminal, feedlot index that completely misses the fact that Angus should first and foremost be mother cows. By the same token, there is the \$E index that is meant for finding cattle with the lowest maintenance requirements that is virtually ignored by mainstream Angus breeders. The two, at minimum, should be given equal importance, or err on the side of \$E!

The ribeye area fad is also troubling. Angus cattle should be average muscled with high marbling, but I have been to large bull sales with both Angus and Limousin where the Angus scanned bigger ribeyes than the Limousins. Angus are not meant to be Continental cattle, nor should they try to compete with them. That is what crossbreeding is for. Muscling has also been shown to have a negative correlation on reproduction in several breeds, so we can assume the same holds true for Angus.

Angus breeders have been famous for using quick generation intervals to make what they hope is genetic progress. This only intensified with embryo transfer when breeders even started flushing virgin heifers, sometimes to unproven bulls. By doing this, over time, you create a herd of

“paper” genetics where you really do not know what you have. This is when fertility and longevity can really start to slide in a herd and even a breed. Cows need to be proven to be candidates for embryo donors and more emphasis needs to be put on longevity as a breed. Fortunately, there are still large pockets of highly fertile Angus cattle with phenomenal longevity.

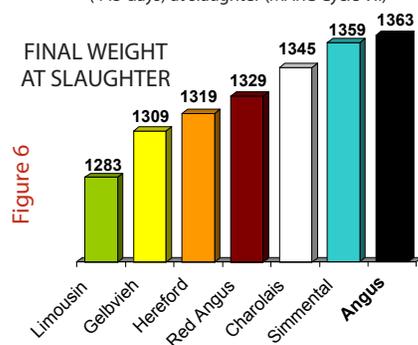
There is a lot of hope as some of the very best minds belong to Angus breeders. I have always said Angus can get into trouble faster than any other breed, and they can get back ahead of all the other breeds faster than anyone could think possible. The average Angus bull still leads other breeds in calving ease while maintaining excellent calf vigor. There is also a tremendous built-in demand for reputation Angus feeder cattle compared to all other breeds. They have excellent brand recognition, perform, stay healthy and do well on the grid. Most importantly, there is a core group of substantial breeders that have not chased the fads and have stayed true to the purpose of Angus cattle in our beef complex. They have maintained moderate size, low maintenance cows with sensible milk, high fertility and longevity, which will produce bulls that sire calves that can be either backgrounded or calf fed, ultimately resulting in high quality carcasses. If Angus breeders use the cutting edge tools AAA provides to breed Angus cattle true to their utility in the industry, instead of chasing fads, the outlook for the breed will be brighter than ever.

^aCundiff, L.V., R.M. Thallman, L.D. Van Vleck, G.L. Bennett and C.A. Morris. 2007. Cattle Breed Evaluation at the U.S. Meat Animal Research Centre and Implications for Commercial Beef Farmers. Proceedings of the New Zealand Society of Animal Production. Vol. 67: Pg. 9-17.

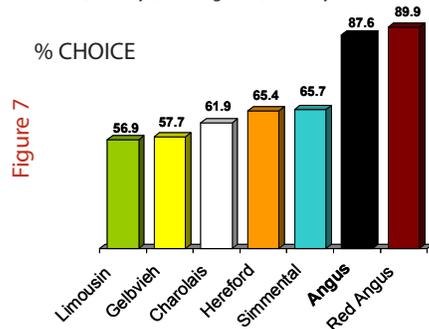
^bKuehn, L. and M. Thallman. 2010. Across Breed EPD Release. Proceedings. www.beefimprovement.org.

^cBreed average EPD: www.angus.org, www.charolaisusa.com, www.gelbvieh.org, www.hereford.org, www.nalf.org, www.redangus.org, www.simmental.org.

Final weight and carcass traits of steers fed to a constant age (445 days) at slaughter (MARC Cycle VII)^a



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