The Wye Line Breeding Program at Roseda

The Wye line breeding program at Roseda boils down to one Angus bull, Mulben Envoist. Mulben Envoist, registration number 1696428, was born February 2, 1950 and was imported to the Wye Plantation in Queenstown Maryland by Arthur Houghton and manager, Jim Lingle. Interestingly enough, he does have EPDs, with a birth weight EPD of -3.2, a yearling EPD of -13 and a milk EPD of +9. In the 1950's era, he would be classified as an average birth weight, high growth, high maternal Angus bull. As near as I can tell, there was never any semen collected and all of his lasting influence came through his daughters. If you can appreciate the influence of Mulben Envoist in the Wye herd, then you will understand the Wye line breeding program at Roseda.

In 1990, after managing the Purdue University Beef Teaching and Research Center for ten years, I was hired to manage the Wye Angus program by the University of Maryland. While at Purdue, I analyzed data from a closed Wye based Angus herd at the Scholar-Purdue research farm for my master's thesis, and used Wye bulls like Contact, Fabron and Lundell in the Purdue teaching herd. So I was somewhat familiar with Wye cattle prior to arriving at the Wye Plantation.

The Wye Angus program has a massive data base, much of which had been incorporated into a custom computer program designed specifically for the Wye herd by Dr. Eldon Leighton and Dr. Kaplon. I had at my disposal, pedigrees, performance information, production data and inbreeding coefficients. In addition, the data had been submitted to the Angus Association so I had the newest animal breeding technology available at the time, EPDs.

As I got into the data, it was obvious that growth and frame were historically important. Jim Lingle had selected the biggest framed, highest performing Angus cattle he could find as foundation animals for the Wye herd and then bred them to be bigger, faster growing but efficient cattle. With his dairy back ground, there was equal selection pressure for strong maternal traits and structural soundness. The obvious breeding program moving forward was to continue selection for increased growth and maternal while maintaining the lower birth weight and calving ease already inherent in the Wye herd.

As I sorted through the highest performing Wye bulls, it became obvious that there were two types of high growth bulls. One was high growth, lower milk and generally higher birth weights. Linebacker of Wye would be the best example of this line. They had plenty of growth, but you had to sacrifice maternal traits and to a lesser degree calving ease to get it. The second group wasn't as extreme for growth as the first group, but was much more balanced for maternal and calving ease. This was the group of bulls I concentrated on which included bulls like Leonid, Fargo, Firdell, Bolton, Bellvue, Phaedrus, Addison, Logan and Banjo.

The nagging question was: What's the underling difference between the two groups? There seemed to be a handful of great cows that appeared regularly in the balanced trait group but rarely if ever in the high growth, low maternal group. At first it seemed Prince of Malpas was the common ancestor of this group of great cows, but there were too many exceptions in both lines for it to be definitive. In all cases when Prince of Malpas was in the pedigree of these great common cows, the maternal Wye line continued on back at least one generation. As I traced them on back, I came to Mulben Envoist. Every time. When I looked at the great cows that didn't have Prince of Malpas, sure enough, there was Mulben Envoist.

Then I looked at the frequency that Mulben Envoist appeared in the pedigrees of the two groups of bulls and it became crystal clear. Mulben Envoist appeared at least once in the pedigree of every bull in the balanced group and generally more than once on both sides of the pedigree. And in general, the more times he appeared in the pedigree with at least once on both sides of the pedigree, the higher the yearling weight and milk EPDs tended to be. In contrast, Mulben Envoist was generally absent from the pedigrees of the high growth low maternal line and the few times that he was in the pedigree, it was only once.

When you analyze the pedigree of **Lyke of Wye UMF 7886**, one of the most balanced high performance bulls to come out of the Wye Angus herd, you will find that he traces back to Mulben Envoist 32 times. In the third generation of his pedigree, 7 of his 8 ancestors trace back to Mulben Envoist at least once. With an EPD profile of: CE +13, BW -0.8, WN +35, YR +54, milk +17 and Marb +0.33, he has one of the best EPD profiles of any straight Wye bred bull.

Bonaparte of Wye UMF 7865 is the result of crossing the two lines. Linebacker on a Leonid X Fargo cow. With an EPD profile of: BW +0.6, YR +41, and Milk +9, he maintains the growth of his sire while reducing the birth weight and improving milk. As an added bonus his marbling EPD is +0.51, probably the highest of any straight Wye bred bull.

In 1996, I joined Ed Burchell at Roseda Farm. We had agreed to keep a straight Wye bred line in the Roseda program. In 1998, we were fortunate to purchase both Lyke and Bonaparte in the Wye Sale. We collected semen on both bulls and began a breeding program combining the genetics of these two bulls. Michael Klein, **Windy Bar Ranch** purchased half interest in Lyke and took him to Texas for natural service. In addition, Lyke was sampled in several other herds as a young sire. Bonaparte went into a commercial herd and was tested against non-Wye A.I. sires including the collection of carcass data. Long time Wye breeder, David Freeman later partnered on the bull and used him through natural service. The bottom line is that these are the most progeny proven straight Wye bulls in recent times, particularly when you consider the actual carcass data collect on both bulls.

Byke of Roseda X051 is sired by Lyke out of a Bonaparte daughter whose dam is a highly concentrated Mulben Envoist cow, Blackbird of Wye 7939, that we flushed in partnership with Jim Rhyne. He actually goes back to one of my favorite Wye cows, Bayette of Wye. He has an EPD profile of BW +0.7, YR +56 and Milk +16. In addition, he has a marbling EPD of .52 in the same range of Bonaparte. He is the best Lyke/Bonaparte combination that we have produced to date.

We needed a third Wye bull to use in the Lyke/Bonaparte rotation and after trying several, settled on Faxton of Wye UMF 8819 through semen purchased from Wye Angus. Faxton comes out of the balanced Mulben Envoist line, though not as concentrated as Lyke but obviously more concentrated than Bonaparte. All four ancestors in the second generation of his pedigree trace at least once to Mulben Envoist setting up the genetic potential to concentrate those favorable genes. With an EPD profile of BW +1.1, YR +52 and Milk +10, he matches pretty well in terms of performance and has enough variation in his pedigree to minimize inbreeding.

Big League of Roseda Y022 is the first bull to graduate from the three bull combination and into our breeding program. Note that we use the "of Roseda" to designate our straight Wye bred cattle. Big League is a Faxton/Lyke/Bonaparte combination. His dam is a full sister to Byke. With an EPD profile of BW -0.8, YR +60 and Milk +11, he seems to have combined the best of the three. I do hope that he

proves to have a better milk EPD as his daughters come into production. His second calf crop is on the ground now.

Loch Raven of Roseda Z117 is our newest herd sire. He is a Faxton/Bonapart/Lyke combination with an EPD profile of: BW -0.7, YR +62 and Milk +15. We are looking forward to using him this Spring, especially on the Big League daughters.

Moving forward, our Wye breeding program will focus on stacking Loch Raven, Big League, Byke and Lyke. We will monitor our inbreeding coefficients with the intent to stay below 15%. I haven't counted the number of times Mulben Envoist appears in our younger cattle. I know it's a lot. I may someday.

I am convinced that Mulben Envoist made a unique genetic contribution to the early Wye herd in terms of combined growth and milk production. Mr. Lingle was a master cattle breeder and an early adaptor of performance testing. He identified and selected the cattle that received superior genes from Mulben Envoist as well as the other foundation bulls. He mated those cattle producing different combinations of the superior genes and selected the best for the next generation. He did that for generation after generation concentrating the superior genes. In 1978, Aurther Houghton donated the Wye herd to the University of Maryland to preserve the genetic pool. While the managers that followed Mr. Lingle were not in the same league as he, they continued with similar selection and breeding programs moving the herd forward and continuing to concentrate the superior genes.

I have often contemplated if there was semen available on Mulben Envoist, would I use it? I have concluded that I would not. I would prefer to build on the years and generations of selective breeding that have gone in to the Wye herd, rather than to Jump back 50 years and start over.

My pedigree analysis of the influence of Mulben Envoist is strictly historical. It didn't change the breeding program at Wye or Roseda. However, it does illustrate the power of selection and the influence an individual animal can have in a breeding program.

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