

Update on the Tennessee Beef Heifer Development Program

Justin Rhinehart

As I write this article, the Tennessee Beef Heifer Development Program is finishing the second group of spring born heifers and has just taken delivery of the first official group of fall born heifers. As a personal note, I want to mention that this program has turned out to be one of the most enjoyable efforts I have helped with so far in my career as an Extension Specialist. It combines all of the attributes that can make a demonstration and service project impactful; a good plan, support from producers and industry partners, and (most importantly) the right people.

You might have read or heard about the program in this magazine, on social media, or at an educational event. But, before I report on the how the heifers have performed, let me briefly remind you of how the program started. In an effort to demonstrate how proper heifer development leads to more productive cows and also reveal an underutilized niche in beef cattle production, the University of Tennessee Institute of Agriculture (UT AgResearch and UT Extension) partnered with the Tennessee Department of Agriculture to construct heifer development facilities on the AgResearch & Education Center in Lewisburg. Then, the Tennessee Farmers Cooperative came in as a third partner to support the program through donation of the working and feeding facilities and continued consultation for management of health and nutrition.

The basic concept behind the TN Beef Heifer Development program is not new and, it is relatively simple. At weaning, you can send heifers (either commercial or registered) from your calf crop that have the potential to be good cows. We raise them through their first breeding season and, if you want to keep them to increase the size of your cow herd or replace mature cows you need to sell, we send them back to you. If you do not need them back or want to use the program as a value-added marketing approach, we will offer them for sale and send you the revenue minus development and marketing cost.

When the heifers are delivered, they should have received at least one round of vaccinations. They are vaccinated again at delivery and given another booster vaccination two weeks later. Also at delivery, blood is drawn and sent to the Kord Diagnostics Laboratory to be tested for BVD-PI, BLV and anaplasmosis. They are treated for respiratory or any other health issues as needed as soon as they begin to show clinical signs. Internal and external parasites are controlled throughout the entire program.

While your heifers are in the program, they are managed under the most current and proven protocols that will give them the opportunity to live up to their genetic potential. The program is not a "gain test" so, they are managed to reach approximately 70% of their expected mature weight before the start of the breeding season. For most heifers, that averages to 1.5 lbs./day from weaning until breeding. We accomplish most of that by grazing fescue in the spring and fall, native warm season grasses in the summer, and corn silage in the winter when forages are dormant. We also use supplemental feed to deliver an ionophore and when needed to balance nutrient requirements if forages alone are not adequate. Of course, high-quality mineral supplement is offered year-round.

Prior to the breeding season, we collect reproductive tract scores to make sure they are ready to breed. At that time, we also measure their pelvic area to make sure they can deliver a normal size calf if it is presented correctly at calving. Their first breeding is done by timed artificial insemination (AI) to a

synchronized heat. They are inseminated again, up to two more times, if they show heat during the breeding season. We do not use clean-up bulls in this program so you can choose the bull you want them bred to. Any sire can be used as long as it meets TAEP genetic requirements as a calving ease bull for that breed and we can purchase the semen from a CSS certified collection facility. We check the pregnancy status (by ultrasound) as needed throughout the breeding season and confirm pregnancy again before they are sold or returned to your farm.

We maintain records and send you reports on growth (average daily gain and weight per day of age), hip height, frame score, disposition score, pelvic area measurement, and carcass ultrasound (rump fat, rib fat, ribeye area, intermuscular fat). These records can be used to get an indication of the current genetics in your cow herd as well as for selecting future replacements produced by heifers that went through the program. For consigners that plan to sell their heifers, these data can also be a valuable marketing tool.

Spring born heifers (January – March) are delivered to the facility in early October, bred April through mid-June, and returned the following September. Fall born heifers (September – November) are delivered in early July, bred December through February, and returned in May. The cost of the program is set prior to delivery for each season so you know what it will be and payment is due at the end of the program when the heifers are returned back to you or sold. Additionally, the Tennessee Agriculture Enhancement Program has provided a scholarship covering a significant amount of the development cost for up to four heifers per owner.

The first two groups of spring heifers have performed very well and feedback from the owners has been overwhelmingly positive. As I mentioned earlier in this article, having the right people involved in this program has been one of the most important components to making it work so well. Wes Gilliam and Hugh Moorehead oversee management of the heifers on a daily basis. They are very experienced and talented cattlemen, always willing to take calls for quick reports and questions about your heifers. Kevin Thompson (Director of the AgResearch & Educations Centers in Lewisburg and Spring Hill) and I coordinate the overall program. Jason Smith, Extension Beef Cattle Specialist for nutrition, also provides valuable management oversight. Again, staff from the Tennessee Department of Agriculture and the Tennessee Farmers Cooperative have been, and continue to be, driving forces that make the program a reality.

If you are interested in sending your spring born heifers to the program this coming October (to have them developed under these protocols and to free up room on your farm/ranch to run more cows), please feel free to contact your local UT Extension Agent or one of us that work with the program directly. You can also visit the program's website for videos and a more detailed description (<http://utbeef.com/BHDPprogram.html>). We will also be hosting meetings and field days at the facility in Lewisburg so, stay in contact with your UT Extension Agent to make sure you hear about those dates in the future. As important, if you are interested in providing this type of custom heifer development for cow-calf producers in your area, we would be delighted to share our protocols and templates as you develop your new business model.