## **Winding Up and Stepping Forward**

## by Bryon Wiegand, Professor Meat Science University of Missouri

As we approach the goal of 200 samples for the meat quality assessment for Highland beef, it seems like time to reflect on what the data gathering is telling us and gives us time to think about what the next step might be. The study update that I presented via recorded media for the Annual Convention sounded a lot like the update from the previous year. In some ways, this is encouraging. We have learned two important pieces of information regarding the beef that was submitted for testing.

First, as we might expect, but now we are certain that the fatty acid profile of Highland beef is strongly influenced by region and diet. Cattle finished on varied forages or corn soy diets will exhibit varied fatty acid profiles. These profiles will fit different consumer demands and palates. Therefore, the marketing of the cattle feeding system becomes important and has potential to provide premium pricing. The key is to find the niche that your system best fits. I have had conversations with some Highland producers over the course of this study that are utilizing this flavor aspect as a marketing tool.

While flavor is a major driver in beef eating satisfaction, tenderness can make or break the repeat purchase. To this end, our data have shown that Highland beef is very tender according to shear force values. This tenderness is consistent in cattle up to 30 months of age with a minimum carcass aging of 7 days in the cooler. I believe this is the most marketable piece of information that we have attained. I also think that this is a marketable characteristic as some Highland breeders seek to utilize their germplasm for crossbreeding systems and breed complimentarity.

What the future holds for Highland breeders is obviously up to the individual. However, some logical next steps for Highland beef assessment could take different forms. The first of these steps could be a sire progeny test. This would require breeders to identify bulls that are impacting the breed and to assess the performance of their progeny in contemporary group testing. Thus, specific sires or sire lines can be identified for performance of their progeny specifically to sell purebred Highland beef from feedlot cattle that optimize growth, performance, and carcass merit.

Secondly, the opportunity exists to identify Highland genetic lines that compliment other breeds and to use these lines as outcross genetics. Hybrid vigor or heterosis could be optimized with other breeds less related to Highland especially in those traits that are moderate to highly heritable such as growth (weaning weight and postweaning gain) and carcass traits (ribeye area, fat depth, carcass weight, and marbling).

As with any type of livestock production system, the future sits with the current producers and the leadership of their respective organizations. It seems those that are able to move forward and experience success are groups that use sound science, proven management practices and an open line of communication with all the stakeholders.