

**A LITTLE BIT COUNTRY
WARREN FROELICH
NDSU EXTENSION SERVICE
WILLIAMS COUNTY**

4-H Beef Project Evaluated for Carcass Merits

4-H members of Williams County are beginning to understand how tough it is to produce finished beef steers whose carcasses will grade USDA Choice. For the past four years Dr. J. J. Hovde has been using ultra-sound technology to evaluate the amount of fat and muscle tissue of every steer brought to the Upper Missouri Valley Fair. Dr. Hovde's scanned readings are sent to The National Centralized Ultrasound Processing Laboratory at Ames, Iowa for interpretation.

The laboratory information gives us data on the amount of rump and rib fat, rib-eye area, in % intramuscular fat (% IMF), also referred to as marbling. Over the four years the amount of rump and rib fat along with the rib eye per 100 pounds of carcass weight has changed very little but the amount of marbling has gradually increased for this year. Age of the animal and marbling are the key components in determining the USDA quality grade.

In 2008, the % IMF averaged 3.1 which barely put the group into the Select + grade. Values for 2009 and 2010 were 3.39 and 3.80 respectively. This year's group of steers averaged 4.58% IMF, enough for a small amount of marbling which would put the carcasses in the low choice grade. However, not all steers had enough marbling to reach the Choice grade. The range was a low of 2.63% to a high of 7.18%. The latter would have enough marbling (slightly abundant) to attain a high choice grade.

The ultra-sound data showed all steers graded USDA Select or better. Seventy percent of the steers graded low Choice or better.

The average rib eye area (REA) and rib fat values have changed very little over the four years. The REA has hovered right at 1.66 square inches per hundred pounds of

carcass weight. Average rib fat has ranged from a high of 0.4 inches in 2008 to a low of 0.35 inches in 2009. This year's steers did have a wide range of rib fat with a low of 0.15 inch and a high of 0.73 inch. The latter would take some market discount, even on a quality grid.

This ultra-sound project has been very meaningful to me, the parents and older 4-H members. Hopefully we can continue to fund this project, improve both quality and yield of the product being offered to the buyers and most importantly, learn more about the genetics and nutritional factors which determine value to both the consumer and producer.

NDSU Specialists Offer Manure Test

With fall harvest approaching, producers soon will be applying livestock manure as fertilizer for next year's field crops. Before applying manure to fields, producers should test it for nutrients to ensure proper application rates.

At a request from producers, NDSU nutrient management specialist Chris Augustin and NDSU Extension livestock nutrient management specialist Teresa Dvorak will go to farms and sample livestock manures for nutrients at no cost to the producers.

The nutrient management specialists also want their farm visit to be an educational opportunity for producers.

"We will teach the producer how to sample manure properly and how to determine agronomic manure application rates," Augustin says.

Published manure nutrient values can be used for planning but manure needs to be sampled to verify its fertility.

"On one hand, you can overapply nutrients, which might cause an adverse effect to the environment," Dvorak says. "On the other hand, you also might shortchange yourself the fertility of the manure, resulting in reduced crop yields."

If addition to helping producers this year, Dvorak and Augustin hope the data they collect will help producers in the future. They plan to use the data to create a

publication that covers nutrients found in North Dakota manures. Cooperating producers will remain anonymous.

"We want 100 samples each in the fall and spring," Augustin says. "This project has funding for three years."

Dvorak and Augustin plan to sample various manures types from livestock on varying diets and from different storage methods.

"The book values we have been using for nutrient management plans are from other areas of the U.S.," Augustin says. "We believe that North Dakota producers like North Dakota numbers, and this is one project that will provide that information."

For more information or to enroll in this program, contact Dvorak at (701) 483-2348 or Augustin at (701) 652-2951.