

Farm Summary

Wayne Roush, farm superintendent

Farm Comments

Developments. The year 2006 saw a continuation of facilities and machinery improvements at the farm. Machinery improvements included a trade for a larger lawn tractor (JD 455) from the ISU Agronomy farm and the rebuilding of the current hay mower/conditioner. Continued improvements in cattle facilities included re-building the pasture scale, installation of a pasture corral and squeeze-tub at the Welles location, refinements in the scale house, and initial work was begun on re-building the sorting and gathering lot fences. Two additional multi-use bulk bins and an additional pen were added at the swine sorting area. New stainless feeders were added to the existing mini-hoops. It has been a busy year of much needed construction and improvements! The 40-acre tract of land donated in 2003 continues to provide space for prairie project expansion. The prairie plant identification garden at the shop area also was expanded. The farm again hosted a student from the Maple Valley schools for a summer work experience. His summer experiences accomplished the goal of adding some practical experience to his classroom training. The ISU animal science student from last year returned for another summer of work experience.

Field Days and Tours. Five events were held during the year with a total of 578 people visiting the farm. The most notable event was the Livestock Field Day held in August. Attendees learned about the availability of ethanol co-products and their feeding, the economics of feeding them, how the proliferation of ethanol plants may affect the availability of corn and ultimately how that could affect the livestock feeding industry. Other events included the annual meeting, Manure Workshop, Manure Applicator

Certification Training, and a Loess Hills Seminar Tour.

New Projects. Pre-trial: defining parameters in establishing an effective test for monitoring sulfur levels in steers fed condensed corn distillers solubles; Defining feeding rates of DDGS for market pigs in deep-bedded hoop barns; Monitoring for West Nile Virus utilizing mosquito gravid traps; Effects of a Vitamin D3 bolus on tenderness and fatty acid profile of a pasture finished steer; Asian Soybean Rust sentinel plots expansion; and Prairie plant identification garden expansion.

Livestock. The major emphasis at the farm continues to be on livestock projects and production with a total of 1,113 head of swine finished, 112 head of steers finished in confinement with another 24 head pasture finished; and 62 head of steers pastured during the course of the year. The feeding of ethanol co-products was expanded as three related projects were added. A feeding trial for niche pigs; "Dietary protein (lysine) reduction for niche market pigs" was conducted. It evaluated how diet manipulation might produce a more desirable niche market pig, i.e., one with a smaller loin eye and more backfat. After this year's conclusion to the triticale feeding trial (a cross between wheat and rye) to finishing swine, a trial designed to define feeding rates of dried distillers grains with solubles (DDGS) to swine was initiated. Cattle trials continued with examining condensed corn distillers solubles (CCDS) as a feedstuff; both as a feedlot ration ingredient and as a pasture supplement. Various feedlot rations and pasture feeding levels are being refined. A pasture-finishing project with steers was initiated to examine the affects of administering a Vitamin D3 bolus at 7 days prior to harvest.

Dry weather once again plagued pasture conditions and alfalfa production. Low soil moisture reserves at the start of the year coupled with limited rains and high temperatures created drought conditions early in the summer. This caused the removal of cattle from pastures (August 3), and a severe reduction in hay yields; first and fourth cuttings at 50% with second and third cuttings at less than 5%. A pre-trial was initiated to “Define parameters in establishing an effective test for monitoring sulfur levels in steers fed condensed corn distillers solubles

(CCDS)” with funding and efforts to continue in 2007.

Crop Season Comments

Corn planting was done on April 26, and harvesting on November 16, with an average yield of 84.81 bushels/acre (drought). Soybeans were planted May 11–15. Harvest was November 16, with an average yield of 41.96 bushels/acre (drought).

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