

Farm Summary

Wayne Roush, farm superintendent

Farm Comments

Developments. The year 2007 saw a continuation of facilities and machinery improvements at the farm. Machinery improvements included the purchase of a new John Deere 6420 tractor with loader. The farm's 1896 Case IH tractor was traded. Continued improvements in cattle facilities included re-building of the sorting and gathering lots by the scale house, rearrangement of fences and corral at the Welles' pasture to allow for subdivision of existing pasture, and replacing the cattle bunk-line cable fence with a new more secure well pipe and sucker rod fence. Project additions included two trials with pasture finishing of steers utilizing condensed corn distillers solubles (CCDS), a corn population trial, a comparison of different transgenic isoline corn hybrids (farmer assisted and off-site), establishment of corn stover plots to examine how stover removal effects soil quality, and establishment of tall grass prairie plots to be utilized in a grazing trial. Approximately 6,500 potted plants were transplanted to establish 128 treatment areas. They will be grazed in 2008 to study the effects of cattle grazing on a tall grass prairie. The farm also hosted two local high school students as summer employees so they might gain work experiences.

Field Days and Tours. Five events were held during the year with a total of 458 people visiting the farm. The most notable event was the Livestock Field Day held in September. Attendees learned about feeding condensed corn distillers solubles to beef cows in lick tanks, what sulfur toxicity problems to be aware of when feeding CCDS, an ethanol outlook, and also a bio-fuel crops update. Some of the other events included the annual meeting, manure applicator certification training, and a tractor school for youth.

New Projects. Summer cattle finishing facilities alternatives; Pasture finishing steers with dried distillers grains; Soil quality effects of corn stover removal; Characterization of potential risk factors of condensed corn distillers solubles to beef cattle; Synergistic effects of ungrazed grazing in a tall grass prairie; Optimizing corn populations in western Iowa; and Comparison of corn genetic isolines.

Livestock. The major emphasis at the farm continues to be on livestock with a total of 926 head of swine finished, 112 head of steers finished in confinement and two groups of 20 and 28 steers pasture finished. Also, 56 head of steers were pastured during the course of the year. A major problem in the swine industry for 2007 was Circo Virus, and the research farm was no exception. A 7.6% death loss was attributed to the disease with another 17.8% exhibiting poor or reduced performance. Vaccine for Circo Virus was in very limited supply and difficult to obtain but once available seemed to work well. Fortunately outbreaks before the vaccination program seemed to avoid the feeding trials. The feeding of ethanol co-products continued as the major livestock project emphasis in both swine and cattle. A feeding trial designed to define feeding rates of dried distillers grains with solubles (DDGS) to swine was conducted. Cattle trials continued with examining condensed corn distillers solubles (CCDS) as a feedstuff either as a feedlot ration ingredient, as a pasture supplement, or as a component in one of two different pasture-finishing programs. Various rations and pasture-feeding levels are being refined. The pre-trial initiated in 2006, "Defining parameters in establishing an effective test for monitoring sulfur levels in steers fed condensed corn distillers solubles (CCDS)" continued in 2007 and plans to continue in 2008. Limited rains in June and July (7.25 in. below normal) resulted in localized

drought conditions developing in mid-summer. This was alleviated in August however, as rainfall was above normal by nearly 3.25 in. The rains continued in September and October creating good pasture conditions. Hay yields averaged 5.4 tons/acre.

Crop Season Comments

Corn planting started on May 11 and was completed on May 12. Harvest was on November 10, with an average yield of 170 bushels/acre. Soybeans were planted May 17 and harvest was October 27, with an average yield of 43 bushels/acre. The odd rainfall patterns tended to hurt bean yields more than corn yields.

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