Introduction to the
James C. Hageman Sustainable Agriculture
Research and Extension Center

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The James C. Hageman Sustainable Agriculture Research and Extension Center (SAREC) began fully conducting research in 2006. SAREC is composed of roughly 400 acres of irrigated cropland, of which 300 acres are irrigated by overhead irrigation through three center pivots and one lateral-move sprinkler. The center has 47 acres of furrow irrigation. The remaining balance of irrigated cropland has been converted to dryland corners. The station also has roughly 1,200 acres of dryland cropland and another 2,000-plus acres of rangeland. A 400-head feedlot is also on site, along with 40-plus mother cows.

Employees at SAREC are dedicated to performing the highest level of research possible. Those on station include the University of Wyoming Extension beef specialist, a research scientist with the Department of Agricultural and Applied Economics, a research associate, the UW pesticide applicator training coordinator and his associate, the director of operations, a farm manager, four assistant farm managers, a part-time secretary, and the office manager.

All of the above people help in achieving the highest quality of research, from small-plot contract work for private industry, to larger grant-funded, multi-state, multi-year projects, to more applied-type research suggested by local interest groups, including the Wyoming Wheat Growers Association, irrigated and dryland farmers, and ranchers.

Background Information

The weather in southeast Wyoming has been extremely variable the last few years, with 2013 being extremely dry and one of the worst winters for wind. The wind and dry weather took a toll on the dryland in winter 2013–14. Crop-year 2014 allowed the dryland to heal considerably. We had a good spring in 2014, which allowed us to plant some spring crops and produce a good quantity of stubble (Figure 1). This helped to protect soil from wind and to retain a considerable amount of snow over the 2014–15 winter. Overall, the 2014 crop year proved to be good for the dryland, yet another challenge.

Figure 1. Stubble produced from 2014 crop year.
for irrigated production with limited rainfall throughout summer and an early freeze.

**Facility Improvements and Activities**

SAREC was able to add a few improvements this last year. In spring 2014, we purchased and installed a new center pivot with VRI (variable-rate irrigation) technology, which should enable the farm to someday create a precision agriculture showcase. We were also able to upgrade planters, including one with a hydraulic drive to facilitate variable-rate seeding. Additional upgrades to this particular planter permits us to place liquid fertilizer as a popup along with the ability to vary that rate as well. These planter improvements allow the center to perform more site-specific research. We were able to upgrade an existing lateral-move sprinkler in spring 2015 to a VRI system. SAREC was also able to acquire a new 15,000 bushel grain bin to help store our yearly corn crop. SAREC delivers a good share of the commodities, both corn and hay produced on-site, to the Laramie Research and Extension Center, which uses it for cattle, sheep, swine, horses, and other animals.

**Rogers Research Site**

The Rogers Research Site continues to be a work in progress. Research led by UW Professor Emeritus Steve Williams is continuing with much effort by local contractors to cut and clear timber. The ground that sustained much damage from a 2012 wildfire continues to heal with the help of Mother Nature. The fire itself created an opportunity for Williams and his team to study long-term consequences of post-fire resource management.

**Acknowledgments:** The dedication and effort of the SAREC team (Figure 2) cannot be overstated. Employees are who make research happen. Without them, a lot of the studies would not be possible. We are totally indebted to them for the work and effort to serve the agricultural community of Wyoming and beyond. Our work is funded in part by the Wyoming Agricultural Experiment Station.

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