

DEVELOPING HANDS-ON EXPERIENCES USING THE AGRONOMY LEARNING FARM. J. Anita Dille and Christopher L. Schuster, Associate Professor and Graduate Research Assistant, Department of Agronomy, Kansas State University, Manhattan, KS 66506-5501.

Agronomy students would greatly benefit from more hands-on experiential learning activities developed to test technical and diagnostic skills, improve critical thinking and problem-solving abilities, and be able to work in teams. The Agronomy Learning Farm is a new facility being made available to undergraduate students at Kansas State University, where they can develop these skills in the field. The Learning Farm encompasses 80 acres and is located within the Agronomy North Farm, a research-teaching-extension facility located three miles northwest of the Agronomy Department building. The Learning Farm is divided into a long-range plan of crop and tillage rotations, with a website acting as a resource for all field information (see address below).

Undergraduate students utilize the Learning Farm through class field trips, in-class research exercises, and undergraduate research assistantships. Crop science, soils, weed science, and soil fertility courses have made field trips to the Learning Farm and have studied how to make weed control recommendations, update soil maps, compare seed placement and establishment with different planting equipment, and develop soil nutrient recommendations. Comments by undergraduate students after a crop science field trip to the Learning Farm: "I really liked this lab. The hands-on experience allowed me to learn more. I will be able to apply this in my future." And "Pretty interesting on how to measure % residue and never done crop scouting before so that was interesting as well. One of the best labs all year." Examples of research projects include studying the site-specific correlations among winter annuals/biennials and soil properties, enhancing soil humus development with different crop residues, and developing soil pH titration curves. The Learning Farm provides a venue for skill development integrated throughout the four-year Agronomy curriculum and provides a resource for extension education and developmental training in the future. Continual evaluation of learning and skill development is occurring to maximize creativity, innovation, improvement, and coordination involving the Learning Farm.

(<http://www.oznet.ksu.edu/agronomy/academics/undergrad/LearningFarm/welcome.asp>).