

AC Magruder and the Magruder Plots

Professor A.C. Magruder is probably best known for the experimental winter wheat field plots that bear his name. He planted them in 1892 on the grounds of Oklahoma A&M College (now Oklahoma State University). They are the nation's oldest, continually-producing plots west of the Mississippi. They were established to evaluate wheat production on native prairie soils without fertilization. They are examples of long-term experiments. The plots became the center for wheat soil research in the region and provided constant data which helped farmers get maximum yield from their arid climates and naturally dry soils. The Magruder Plots were entered into the National Register of Historic Places in 1979.

Magruder came to Oklahoma A&M College (now Oklahoma State University) in 1891 at the age of 24, with a BS degree in agricultural science from Mississippi Agricultural College. He had also attended graduate school in Germany and worked for a short time at the West Virginia Agricultural Experiment Station.

Magruder met groups of farmers in homes, barns, fields and pastures, providing science-proven recommendations and soliciting feedback through round table discussions. He spent many hours answering specific requests by mail.

In 1947 the plots were moved to make way for a new dormitory. University officials dispatched workers to carefully move the surface and immediate subsurface soils from six of the ten main plots to a location about one mile west, on the OSU agronomy farm. The reddish clay subsoil under the new location was similar to the subsoil under the original plot. The top eight inches of soil was removed with a bulldozer from an area of 100 feet in length near the center of each plot and was piled on each end of that plot. The subsurface soil from 8 to 16 inches was excavated and transferred to prepared trenches dug in a east-west direction on the agronomy farm. Studies conducted on the site after the move, when compared to similar studies conducted before, showed that moving the plots of soil did not significantly change their relative crop-producing capacities. No evidence has indicated that the move disturbed the soil or hindered the research value of the area, which continues to be used for its original purpose.

