The Smith family have farmed and ranched in eastern Dickinson County for 3 generations. The operation is now run by Dan and his son Joseph who is finishing up his Agronomy degree at Kansas State University. For the past 6 years, Dan has also served on his local Conservation District Board of Supervisors and has attended some meetings regarding improving soil health and how it relates to mediating climate change.

The farm consists of some leased and some owned farmland as well as owned rangeland. They run a cow/calf operation with about 100 cows. Dan has been utilizing no-till practices on his farmland for 15 years.

Dan has witnessed firsthand the effects of a changing climate on his farm. The periods of drought are more intense and long lasting. The rainfall events are no long gentle showers, but heavy down pours that lead to terrace damage, gully formation and more erosion of topsoil from his fields.

As Joseph returns to the farm, he has begun talking with Dan about how they can adapt on the property under his stewardship to increase his carbon capture to not only improve his soil health, but also to help in the effort to mitigate the changing climate. They have also heard about incentive payments from private companies such as ADM that are available to them through, their local conservation districts and the Kansas Association of Conservation Districts. They have also checked into federal programs offered through NRCS.

Joseph and his classmates have made it a class project to look at the Smith's operation as a whole and make recommendations to his father for changes that would benefit their farm and wider environment. They have also included, as a component of their project, suggestions for incentives that could be offered to help producers adopt some of these stewardship practices.

For your oral presentation, be Jacob and his classmates and present your suggestions to both Dan and the local Conservation District board.