In the paper <u>Barbed wire: Property rights and agricultural development</u> written by Richard Hornbeck, the author takes a dive into agricultural development of the 19th century. Hornbeck questions the affect of the introduction of barbed wire, especially in agricultural areas with a low access to wood, to agricultural output, quality of land, and land ownership. Hornbeck user data from the Census of Agriculture when tackling this question.

When using this data to analyze the question at hand, Hornbeck looks at the development of agriculture in two groupings, farmlands that have high access to wood needed for standard fencing, and areas which had low access to needed wood. Hornbeck measured a few points of outcome interest when diving into the data. He looked at the output of farms, the quantity of land ownership, and the improvement of land quality before and after the introduction of barbed wire. He found that after this technological advancement had taken place, there was a spike in agricultural development in counties with low access to wood. This jump in output was due to a higher comfort level in terms of making an initial investment into a farm (a higher land ownership) as one could protect this investment for less. This jump was also due to a decrease in technical issues that came with an unprotected farm such as damages, low control over your animals and a low indication of the division between farm lands. Technical advancements also came about as these areas found that fencing their farms in led to higher benefits in terms of feeding animals and keeping them concentrated in needed areas.

When looking further at this question, I would pose a follow up which is did the introduction of barbed wire lead to a fall in the deaths of cattle in the American Plains during this time? My question is based off of an assumption that cattle, when not fenced in, would come across issues such as death by other animals, straying to points of not returning, and encroaching on others property and being killed / engulfed into their flock. All factors which could lead to a difficulty in sustaining a flock and thus I would like to know the answer to this question.