

## FarmLAN

FarmLAN is a concept we've been describing for a few years now. While it doesn't exist yet, it surely will. FarmLAN is the local area network on the farm that connects everything on the farm to a farmers strategic partners. All equipment, tank storage, inventory, feed, grain, and animals will be connected to the network and will allow partners like veterinarians, consultants, applicators, bankers, seed companies, crop protection companies, nutrition companies and grain elevators to interact with the farm enterprise. Not only will this enable data transfers but also voice and video. The farmer who has a FarmLAN will be able to detect leaf moisture, soil pH, ground temperature, storage capacity, yield both projected and actual. This information when input into models can predict crop performance and performance inhibitors like pest and disease. FarmLAN will have the capability to produce real time financials and even support claims for hail and other crop insurance risks. For example, a crop canopy (density of plant which shades the ground) measured before and after a hail storm can very accurately quantify the bushels lost as a result of the storm. Lest we think this is too far out, researchers are currently working with a prototype technology that allows a chip to be embedded in a plant. This RFID chip will transmit a signal to trigger irrigation whenever the plant requires water. None of this can happen with broadband - the US farmer needs broadband to be able to compete in a global economy.