

Following college at University of Wisconsin-LaCrosse for business, Charles Todd returned to the farm to help his father. At the time, they had a cow/calf operation and feeder cows, along with growing crops; currently they are running about 550 acres of tillable land with a typical corn and soybean rotation, while practicing no-till. Prior to switching to a no-till practice, Charles was doing a lot of tillage including a fall chisel plow and spring disking two or three times. After thinking about it, he felt it was too much for the ground and there was a significant amount of erosion taking place. In 1985 or 1986, was the first time no-till was tried on the farm, with no-till corn being planted into an alfalfa field. At this time Curt Hage, who is a custom planter, was hired to do the planting until Charles purchased his own planter in 1987.

Charles Todd is currently operating a six-row Case IH 1200 corn planter, which has two coulters for fertilizer, row cleaners behind the coulters, and a single coulters in the planting row. For soybeans Charles, uses a Case IH 5400 15-inch row drill that is 15 feet wide. He has customized his corn planter by adding an extra bar for the two Yetter coulters, in order for fertilizer to be applied during planting. Dry potassium and phosphorus are broadcast applied by the co-op every two years, in the fall, in order to maintain higher levels. Liquid P and K are applied two and a half inches on the side of the row at planting time. Phosphorus is applied at a rate around 35 pounds with a little potassium within the mix. 28% liquid Nitrogen is applied at a rate of 100 pounds with the planter and 30 pounds with the sprayer during the herbicide application when the crops are spiking. With applying the current rates of fertilizer, yields have ranged the last ten years from 165-225 bu/ac for corn, with an average close to 200 bu/ac, and 45-58 bu/ac for soybeans. Charles has not really seen a decrease in corn yields, but has noticed a slight difference in beans because prior to no-till his bean yield was around 60 bu/ac. He feels that when making the switch, beans take a hit on yield more than corn does; but to him a small yield difference would not pay for the added tillage that would need to be done.

Weed control is important to Charles. For corn he is applying a pre-emergence herbicide at the spiking stage or just before with two quarts, which is half the rate, of Lumax[®], a grass and broadleaf herbicide; along with Round-Up[®] post-emergence to kill any weeds that may have survived or grown since the previous application. In soybeans he used two applications of Round-Up[®], one at emergence and one right before canopy. Besides the application of Round-Up[®], he also adds Select[®], to help control the volunteer corn that is Round-Up Ready. Charles stated that he does not rotate herbicides and uses close to the same ones each year.

Since changing tillage systems, Charles Todd has noticed a decrease in soil erosion. He does still see some between the rows, the need to be taken care of every few years, but nothing major. Some of the fields he plants up and down the hill do not have much erosion either. Charles believes, "with the improved soil quality that more of the rainfall is absorbed before it can start to run down the slope." Soil quality has been improved because more residue is left on the surface and the more abundant earthworms break it down. Charles commented, "Mother Nature does it on her own without tillage except for earthworms, it just seems that there should be a way we can make it work. And I like putting that seed in the ground with all the trash on top because the seed to soil contact is always good."

Currently, Mr. Todd, is not using Global Positioning System (GPS) technology, but is considering purchasing it later on. He would like to purchase it if he would start doing strip tillage in the fall, which has been considered.

Overall, Charles is happy with the changes that have taken place within his tillage practices and looks forward to potential changes that may occur in the future, such as adding a GPS system and new equipment that becomes available. Advice Charles would give to producers considering going to a no-till operation is to be fully committed to the change and get the proper equipment at the beginning. Along with changing equipment, change the fertilizer practices to fit the tillage system and apply the fertilizer during planting in order to reduce the number of trips across the field. He would also recommend not putting all of your fields into no-till right away until you are sure it works for you and you are fully committed to it.