

If you want to be one with the land you have to experience it. You have to smell it. You have to hear it. You have to feel how it rises and falls. You have to walk its hills and valleys.

The farmer's connection to his land changed when he stopped walking and climbed into an air-conditioned cab sitting on top of 700 horses, steered by GPS and talking on his cell phone.

I came along when farming was moving from horses to tractors, but we were slow to transit. Most of our neighbors had tractors long before us. It was probably the late 1940s before we got an Allis Charmers C (20 horsepower). A tricycle design: Two big wheels in the back and two small wheels, slightly angled inward, in the front.

I did my share of walking. Picking corn. Pitching bundles. "Making" hay. Pitching peas. Shocking grain.

I grew up with horses. There were a few farmers who had mules or donkeys, but they were few and far between.

You learn from Michener's Centennial that settlers preparing for their westward trek from St Louis were of two types – horse people and mule people. Though they did not know it when they gathered in St Louis, their odds of getting to California were better with mules than horses.

Mules have two features that made them better than horses for the trip. First, because they are more water conserving than horses and second because of their temperament. "Stubborn as a mule."

When a mule has had enough it quits; won't go regardless of how much you pull or push. It will not move until it is good and ready.

A horse will keep going until it drops. You can kill a horse by overwork. You cannot do that with a mule.

The population of draft horses started declining in the mid 1920s with the advent of tractors. Today they are more for show than for work. Who does not enjoy the Budweiser Clydesdales in a parade or a wagon loaded with kids drawn by a team of horses?

One of the few places where you can still see horses at work is in Amish Country. We are not far from Amish Country. In our younger days we use to go to Amish Country to watch farmers working their fields with horses.

We had five horses. Five for pulling the grain binder. Three for a single bottom plow. Two for a one row cultivator. Two for a hay wagon. Two for planting corn. Four for seeding grain. One for a stone sled. Two for spreading manure. Two for raking hay with a dump rake. Two for mowing grass.

You can tell a lot about horses by their eyes and ears. Watch out if the ears are back. There could be a kick coming or a "rear up". If you can see the whites of their

eyes stand clear. The horse is spooked and may be heading down the road without you.

Some years ago, sitting for a final exam of a student for her doctoral degree, one of the professors asked the student if she knew the differences between Gee and Haw -- proving, as I have repeatedly reminded students, they can be asked anything, so studying for the exam is futile.

The student was at a loss.

She soon learned that gee, in horse talk, meant go right and haw meant go left.

Alas, another student in the dust heap.

We planted corn with a two row planter, checked, meaning the corn was planted in hills about 40 inches apart with three to five kernels per hill. Today corn is drilled. No hills.

The planting process involved an operator, a team of horses, a two row planter, and a spool of wire. The wire was on a reel with "knots" every 40" to do the "checking".

The starting point was at the border of the field. The first step was to unwind the reel of wire, accomplished by attaching the wire to a stake "stepped" into the ground and then driving to the other end of the field, unwinding the wire as you went. When at the far end the operator dismounted, removed the wire spool and staked the wire as at the other end. Then the operator turned the team to bring the planter along side the wire. When in position, the operator picked up the wire and slipped it into a lever-like device on the planter. The device was two pieces of metal about 1/4" apart with a wide opening at the top; like the spread at the top of the letter Y.

Next the operator mounted the planter and lowered the marking guide for where the next two rows were to be planted. The guide was a disc on a metal rod that made a farrow where the next rows were to be planted. The marks were essential for keeping the rows straight and separated for cultivating later on.

The wire did the "checking" as the horses walked. The wire would slide through the lever device unimpeded until it encountered a "knot", serving to pull the lever back until the wire came out of the opening at the top and then snapping back into position until encountering the next "knot". The movement of the lever by the "knot" moved a plate in the seed container to cause it to drop kernels of corn down a shoot into a farrow and then covered by discs behind the shoe.

When the operator got to the end of the row he picked up the marking guide, dismounted, removed the wire from the lever, turned the team, restaked the wire, slipped it into the Y shaped lever device, remounted, slapped the reins and headed to the other end of the field.

And so it went.

The amount planted per day varied, but 10 acres would be a good day. Now, 10 acres would take less than an hour.

With checked corn you could cultivate both ways; the way the corn was planted and across rows. In a checked field you could see rows every way you looked. North-south, east-west, and diagonally. A great sight but no more. Checked corn went away in the fifties in favor of drilled corn. Cultivating went away once the rows got too narrow to drive between and with Roundup to keep weeds down.

My job from early on was cultivating corn with a team of horses and a one row cultivator. The cultivator had six V shaped shovels. Three staggered on the left and three on the right frame. The frames were raised or lowered by the operator.

The thing about cultivating with horses was that you had to stop every now and again to rest the horses. Sometimes, if a neighbor was working an adjoining field, you rested by the line fence and conversed with your neighbor. Other times you just stopped in the middle of the field, got off, stretched out, and took 40 Zs behind the

cultivator. How sweet that was lying on freshly turned earth, sun shining, and leaves rattling in the wind.

Once I migrated to a two row cultivator mounted on the front of the C Allis Chalmers there were no more excuses for resting or talking to a neighbor over the fence. Too bad.

Horses have personalities. My team was Chub and Dick. Dick was high strung. Chub was laid back. Dick was always heavier in the harness than Chub. Chub was content with the arrangement.

Horses have clocks regulated by the sun. When the sun came overhead their pace quickened. They would go like gang busters coming down the row toward home. Then, if I decided to make another round before heading home, it would take forever to get to the far end of the field, but once you turned and headed for home, hold on! Tails half raised and dirt flying off shovels to adjoining rows. Lift the shovels and they would turn for home in a half trot. No need for reins. They knew the way!

My dad did the plowing; three horses and a single bottom plow. The practice was to plow in the fall to get ready for spring, By November everything was black.

Plowing with horses was slow work. Hard on horses. Lots of rest stops over the day. Within minutes after breaking ground there would be a line of galls overhead watching for worms and grubs. Where they came from was a mystery because you never saw them otherwise. They appeared from no where once the plow came out.

The rich black dirt rolled off the moldboard in a continuous stream, glistening in the sunlight.

The trouble with plowing was what happened in the winter. Wind took the top soil from the barren fields and deposited it in ditches along road sides. The snow in ditches would be black with top soil.

Topsoil is what makes land productive. If it blows away we will starve. Eventually, like the cultivator, plows went away when farmers entered the no till age.