Dennis Hoyle might equate his experience to that of a third grader when it comes to soil composition, nutrients, and management, but he talks like a fired-up college professor with a new crop of eager students when he explains what goes on beneath the surface on his farm.

“I still don’t fully grasp how much life there is underground, and what it all does. First time I heard a guy speak about mycorrhizal fungi I thought the man had lost his cabbage! Now I understand that this fungi can do some amazing things,” he said, sitting near his farm buildings, cattle grazing on lush grasses nearby.

He learned about how the fungi link the plant with soil by acting as agents of nutrient exchange, among other things.

Hoyle continues to farm the family farm started in 1910 with his great grandmother and grandfather. It has remained a grain and livestock operation ever since.

Looking out over the tall grasses waving in the wind, he says the resource concern is the soils are degraded. "I was improving my soils before I knew they were degraded," Hoyle said. "I didn't know what the organic matter was when I started no-tilling in 1986. I was saving moisture and was controlling erosion, but there’s a lot more to that."

"Where we have livestock, our organic matter is 5.5 percent or higher, and where we farm it’s in the low to mid-3 percent," he said. He hopes to bring that number back up with no tilling and correct grazing of livestock.
profiles in soil health
Hoyle explains, “The first thing we did was to no till. To stop doing damage to soil. Now we’re adding cover crops and putting livestock back on the land and grazing. We like having livestock graze cover crops out in the field. So, instead of a combine we have cows. Everything stays there, nothing gets hauled away, except the gain.”

He talks about how his cover crops improve water infiltration. “It’s a way to pull carbon out of the air and put it into the ground, carbon and organic matter are basically the same thing, so if I can pull carbon out of the air and put in the ground, I’m making the soil healthier,” he says.

Regarding his education in all things soil related, he says, “There are lots of YouTube videos and plenty of data on the internet. Folks from the NRCS really help us out too.” The NRCS has a plethora of information about soil health to assist farmers on better soil management.

Walking across a pasture, spade of earth in hand, he sorts through a knot of healthy-looking earthworms. “I’m old enough some people think I should retire, but I have no desire to retire. As long as I have my health I want to keep doing this because it is fun, and I’m seeing some improvements, and I try to teach it to my kids. I learned a lot from preceding generations and I feel obligated to pass that along.”

And he explains further. “There’s no point in me raising my organic matter on this land and only to have it sold and turn into a corn and beans operation or conventional farming.”

And he’s not just talking the talk. He’s walking the walk. “I’m a member of Soil Health Coalition too. I enjoy learning from them, there is a lot of experience in that board. The mentors are great,” he continues. “I’ve had several, so if I get to be one, I’ll be grateful since I’ve had so many good ones myself over the years.”

As he walks back to the homestead, he sums up his feelings. “I heard John Wooden speak one time and he said that you can learn by your mistakes, but they don’t necessarily have to be YOUR mistakes, you can learn by other people’s mistakes. And that’s something that has stuck with me. I’m trying to learn by other people’s mistakes, and I make a few of my own so I can help other people understand what NOT to do.”

Want to unlock the secrets in YOUR soil?
Go to: www.nrcs.usda.gov