

Teaching an Old Farm New Tricks

I have been lucky enough to grow up on my family farm and have been even more fortunate to have an increasing role in managing it as time goes on. One aspect that I love the most about our cattle operation is that its always been a family even, from fixing fence and knocking down weeds to moving cattle from the home farm to the pastures. Our pasture ground has been fairly easy to manage. As many other farmers have also endured, we've had our share of thistles but thanks to some hours put in with the corn knife, it seems we have gotten rid of the problem. The grass in the pasture grows well, the only problems that we typically see are the common ones, summer slump in our cool-season grasses, and limited growth in high traffic areas.

Over the past few years we've put in a lot of elbow grease and time to revamp our fencing to extend our grazing pasture space, and more what perhaps is more exciting is to incorporate rotational grazing. It was a long process, but we are now grateful for the extra five acres that we set aside for grazing. It took some convincing to get everyone on board with rotational grazing; however we've been able to iron out the wrinkles. When they first go out to pasture, they spend about three weeks on the first half. We then move the cattle to the second half for the following three weeks, and then open up the smaller 5-acre section when it looks like they are getting low on grass. Since implementing this best management practice, I have observed that our pasture ground tends to last a little bit longer because we are able to limit excessive plant stress. We also reduce the pressure on the pastures by supplementing a small amount of grain daily. Through-out the winter months, we bring the cattle back to the home farm and fence off the two fields that are behind the barn. This satisfies the cattle's need to graze and increase the farm's bottom line by reducing feed costs.

This past summer I had the opportunity to intern at Olmsted County Soil and Water Conservation District (SWCD). The district had a small unused plot of land on their soil health farm, which they offered to me for the summer to do a research project on. I wanted to find an idea that would incorporate both the SWCD's goal of improving soil health and my family's goal of maximizing our beef grazing operation. The main crop rotation around me consists of corn and soybeans, and additionally, most of the farms are all conventional tillage. After doing some thinking and conversing with professors and colleagues, I decided to do research

into different cover crops that can be utilized for grazing and other forage options. Cover crops have many benefits to soil health. It takes five hundred years for nature to replenish one inch of top soil. One of the benefits to using cover crops is holding that top soil in place. If we think of nature there is never a time that the soil is bare. With the grazing plan that I have come up with there is never a time that the soil goes uncovered.

Here is how you would implement my research. Go about your rotation normally with corn the first year and soybeans the following year. For the soybean year plant, a shorter variety so then you would be able plant winter rye after you harvest your soybeans. With enough time for the rye to have time to establish before the first snowfall. The following spring after the rye has had time to grow you will be able to take a cutting for a dry or wet forage. After you take your cutting you would then want to kill off the rye. After killing off the rye then you would come through and seed it with a grazing mixture. A crucial point for your grazing mixture is to make sure that you have a good plant species representation of each family. For example, the mixture I used in my research plot had four legume species, four brassica species and three different grass species. The point of having so many different species is so that your roots are at all different depths in the soil. Each plant species has a different root depth. The multiple lengths in roots will help break up the hard pan from soil tillage. After letting your grazing mixture grow for about a month and a half you will be able to finally graze it. This timing lines up very well with what I call the dog days of summer or the end of August. Then when your main pasture is not producing as much you would be able to move your cattle over to your grazing field for the rest of the summer months. After your pasture year you go back to your corn year and start the process over again.

As a producer I am always looking was to improve the family farm. My summer experience has helped me experience realize how important research is and that there are multiple ways to accomplish the same goal. Being a college student that is studying agriculture has also given me more say in the family farm. My dad, grandpa and uncle take my opinion and thoughts into consideration. The past three years I have been trying to convince my family that we need to implement a practice that will help with replenishing our soil. This research project that I did over the summer was very convincing to them. It was finally a practice that they could see getting behind. I am happy to say that this past fall we seeded winter rye on one of our fields and we will be testing out my grazing research on a larger and functional scale.