



Rademacher Farms Newsletter

Newsletter 1 - We're Back!

March 2020

Recap

Welcome to the 2020 newsletter series! If you're new, welcome! If not, welcome back! This is our 3rd year of newsletters and we're excited to share what we're doing this season. Last year was certainly a trying season due to early wet conditions followed by a drought, resulting in yields about half our expectations for the year. 2020 certainly can't be worse, and we're excited for another season!

For anyone new to us, our approach looks a little different than most farms in the area. We think there's a lot of issues facing agriculture today and in the future. Profit levels on farms are often struggling, pests are becoming resistant to chemical methods, and issues such as erosion and nutrient loss are causing serious environmental consequences, like algal blooms and the Gulf dead zone. These problems pose a big risk to agriculture's current operational model, so we've decided to adapt to what we think the future looks like. For example, we don't use tillage and try to keep living roots in the ground between cash crops with plants called cover crops. By eliminating tillage and trying to mimic nature, we aim to minimize the amount of synthetic inputs it takes to grow a crop, with the goal of increasing profit and reducing negative environmental impacts.

What are we working on this year? We have a wheat crop in, cover crops growing before corn and soybeans, and a field of cereal rye planted that will get harvested and sold as cover crop seed, which is a new experience for us. All our corn and soybean acres are Non-GMO, which will be used as Non-GMO feed for animals. All of our corn/soybean acres will be planted into big (sometimes 5ft+!) living cover crops that will allow us to spend less on fertilizer and pesticides.



What's going on now?

Cover crops are mostly waking up from winter and have been slowly growing as weather warms up. Right now we're taking care of wheat and getting ready for corn and soybean planting. Wheat gets fertilized twice and possibly gets one spray of fungicide to prevent a disease that makes the grain toxic. As of writing this, I've fertilized wheat once and should be doing it again in late

March/Early April. After wheat harvest, we plant a summer cover crop mix that will suppress weeds and make nutrients available for the corn crop that gets planted into it the following year.

Wheat isn't quite as profitable as corn and soybeans, but there are several benefits. It spreads our workload since wheat is planted in fall and harvested in spring, makes residue for suppressing weeds in future seasons, and gives a chance to grow a cover crop over summer that improves soil, provides food for pollinators and wildlife, and provides nutrients for future crops. With this year's warm winter, it's the best looking wheat crop we've had and I'm excited to see how it turns out! The next crucial time begins around Memorial day when wheat begins to produce grain.

Dicamba Update

Last season we wrote about our struggles with Dicamba, a popular herbicide. Soybeans are very sensitive to Dicamba, but some GMO soybeans can be sprayed with it. Non-GMO and certain GMO soybeans are vulnerable to the herbicide, as are many broadleaf plants. Unfortunately the herbicide has a tendency to move from the original point of application (sometimes miles away) and harm any broadleaf plants in its path, including trees. A lawsuit was filed by a large peach orchard alleging that Monsanto/Bayer released Dicamba herbicide knowing that it would move and harm other plants. The lawsuit claimed that the orchard lost the last few years of production due to the effects of the herbicide moving from nearby fields. The jury found Monsanto/Bayer guilty of "conspiring to create an ecological disaster in the name of profits" and awarded the peach orchard 265 million dollars. Oof. There's thousands of farmers that have been affected similarly and it's hard to tell what impact this will have on herbicides in the future. It's a story to follow for sure!



Cereal rye roots make a thick net that holds and builds soil. It uses energy from this deep root system to grow several inches/day later in the season.

2020 Tests

What are we testing this year? In corn, we'll be trying to figure out just how much fertilizer we need and if we really need fungicides and insecticides on the seed. If all goes as planned, we'll also reduce our herbicide trips on corn down to one.

In soybeans, we'll be doing tests on how little herbicide we need, and when we need it. We'll plant into 5ft tall cover crops that we'll roll over into a weed suppressing mat. Based on university research, we've completely stopped using insecticides on soybeans and will be testing if the fungicide coating on seed is necessary. We'll also begin some very small experiments with no synthetic inputs of any kind.

Next newsletter should be out next month and give cover crop updates, followed by one in May detailing planting. We are looking forward to sharing our growing season with you! If there's any questions or comments, feel free to share and we'll try to incorporate them into future newsletters!

Frank