



# Rademacher Farms Newsletter

Newsletter 7 - Wheat Results

August 9, 2019

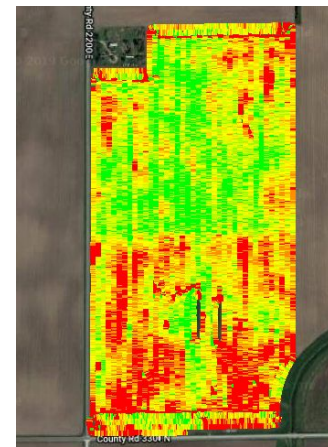
## Harvest Conditions...and mistakes

We harvested wheat in early July. The first field we harvested at too high of a grain moisture. This means that the moisture was too high to take to an elevator (which sent back the trucks we originally sent there. Whoops), so we stored it, dried it down, and delivered it later. This field was ~2 days from being ready to harvest at the correct moisture, but looking that the forecast at the time, they were calling for nearly a week and a half of rain. The week and a half of rain - assuming the rain even stopped after that - would have potentially serious impacts on our wheat. When it is ripe, wheat kernels fall to the ground, and too much rain may cause some rotting or sprouting. Strong storms can also make the wheat fall over.

As one might guess, after we harvested, they took all the rain out of the forecast and it has hardly rained a drop in the past 6+ weeks. True to this year, the only times they actually remove rain from the forecast is when we made serious decisions based on it. Can't dwell on that though, we make the best decisions we can at the time, with the information available. Since it immediately got hot and never rained, the other field was harvested at the correct moisture and went straight to the elevator several days later. So how did it go?

We had more frost and water damage than we were hoping for, and I would guess that was our yield limiting factor. And the unfortunate thing about that combination, is that frost damage hurts hillsides and hilltops, where there was no snow cover last winter, and low areas get damaged by water. So, everywhere. Corn is facing a similar dilemma this year. Low areas that were planted too wet are looking rough. Now higher elevations, planted in good conditions, are suffering since we didn't receive rain in the month of July. I don't mean that to sound all doom and gloom; it's good to analyze what's going right and wrong during the season, due to both weather and management.

The picture at the right shows a yield map from one of the fields. The horizontal line in the middle represents the crest of the hill in the field. The south hillside got the brunt of the chilling winds during the polar vortex this winter. The green areas on the south side are depressions that snow sat and protected the ground. The northern hillside was relatively well protected from wind and yielded significantly better. The northeast corner represents a low spot with water damage. A tough season for wheat (and everything else) unfortunately.



Despite all that, our overall average was about 83 bushels/acre, which is far below my goal of 100, but with this year, heck I'll take it. 5 months ago we had insurance adjusters out helping us decide if we had enough damage to justify terminating the wheat. Despite that terrible start, we still performed at or above the typical county average of upper 70's. This year's data hasn't been compiled yet, but state average wheat yield runs in the mid 60's, and we're happy to be comfortably above that also. So let's crunch the numbers:

## Financials

Last year we had a wheat cost of 124\$/acre. There was no fungicide applied, unlike this year, but seed cost was much higher (since planting rate was too high last year), mostly as a result of inexperience since it was our first crop. Luckily we were able to shave more cost this year, despite the fungicide application. This year's performance:

Seed Cost:-----	45\$
Nitrogen:-----	32\$
Fungicide + Application Cost :-----	<u>23\$</u>
Total:-----	100\$/acre
Revenue :	
83 bushels/acre @ est. price of \$5.50 -----	\$456/acre
Total Projected Profit: -----	356\$/acre

I'm pretty happy with that profit/acre for wheat this year. I'd like to push costs down to about 90\$/acre next year, and be closer to 90 bushels/acre. The combination of those two things would put our profit closer to 400\$/acre.

As I always tack onto a wheat newsletter, while profit of wheat isn't as impressive as corn, it does increase our multiyear profit. Research has shown an increase in corn yield by 5-10% following wheat. It also allows us to save about 25\$/ acre in corn seed costs next year by using non-gmo seed, due to reduced insect and weed pressure. In addition to that, we will potentially skip a herbicide application in corn next year, which would further reduce costs by about 20\$/acre. So while year 1 profit is underwhelming, it has a lot of potential to impact future profit. It is important to note that it isn't wheat exclusively that makes this possible, but a winter grain. A winter grain confuses pests, mixes up disease cycles, and confuses weeds that are used to corn and soybeans.

## Future Directions

So if it isn't only wheat that can increase our multiyear profit, but any winter grain crop, why not grow another winter grain crop with even higher profit potential? Unfortunately, the only winter grain we can take to a local elevator is winter wheat. Despite this, one option we're going to try next year is growing a small acreage of cereal rye for seed. Instead of growing a crop that will ultimately go to a grain elevator, growing for seed would allow us to sell to other farmers that would then plant it as

a cover crop. Cereal rye, a winter grain similar to wheat, is one of the most popular cover crops in the nation. Demand for cover crop seed is rising rapidly, so it's presented a nice opportunity for us. Best of all, all the benefits of planting wheat, we could achieve with cereal rye and at a profit level that meets or exceeds the profit of corn or beans. We're excited to grow something new!

## **After wheat cover crop progress...kind of.**

After wheat, we plant a 10+ species cover crop mix. This mix improves and loosens soil, makes nutrients available for next year's crop, makes a weed suppressing mulch, and attracts all kinds of beneficial insects and wildlife. This was planted immediately after wheat harvest.

Well. It's dry. It hasn't rained a significant amount since late June maybe? We did get up to 0.4" in some fields yesterday though! As you would expect, no rain, not much growth. I was holding out on this update for some cool pictures of sunflowers and buckwheat, okra, radishes etc. but not much is growing yet. Now I'm thinking that maybe if I send it out this newsletter it'll rain more? About 10% has germinated (how I don't know) and growth is slow. So no pictures. If it ever rains again, expect all kinds of pictures of big roots, flowers, and bugs!

Frank