Louas Jarms Newsletter August 2010

EARLY SPRING MEANS GREAT CROPS

Greetings from Jason and Sarah! We are enjoying the warm weather this summer, and we hope that you are finding an opportunity to enjoy it as well!

It is wonderful to report that as of July 20th the crops look great! The corn is tasseled and pollinating. The soybeans are flowering, and little pods are starting to form. We are way ahead of last year in our crop development. One reason why we are so far ahead of last year is our planting date. As We planted the corn a good month ahead of 2009 and about a week ahead of the average planting date. Due to a rainy May, the soybean planting was

a little more challenging than the corn, but we still finished by the end of May.

We have been fortunate this year in the weather department. It seems as though 2010 is the year for wild weather events such as tornadoes, large hail, and flash floods. In Hillsboro, we have been lucky as most of that wacky weather has missed us. We have actually been a little on the dry side. However, because of a couple of recent rains, we are keeping away the drought stress.

The summer temperatures have also been a factor in our crop development this year. The best way to describe this summer's temperatures is to say that we have had "Just-Right-Warm-Temperatures." Corn development is determined by Grower Degree Days (GDDs). Corn doesn't grow below 50 degrees Fahrenheit, and its fastest growing speed is achieved at 86 degrees. We use these temperatures in a mathematical formula to help us determine the rate of



Knee high by the 4th of July? Jason measures corn on July 4th. As you can see, we were way past knee high at that time!

growth and how long corn will take to reach maturity. From April 20th (corn planting date in 2010) until July 19th, we have accumulated 1,258 corn GDDs. Many of the hybrids we raise will require just over 2,200 GDDs to mature, so we are halfway there! As it stands now, we are 79 GDDs ahead of the five-year average. Furthermore, after considering that we planted a month earlier this year, we are 403 GDDs ahead of 2009. It's looking like a corn harvest where we will have good yield, test weight, and moisture.

The soybeans are also farther along this year than they were a year ago. They are now flowering nicely and starting to pod. Hopefully, we can keep the timely rains coming so we can get all the pods to fill. Also, so far the soybean aphids are staying away. We are all hoping that this can be the year when we don't have to spray for soybean aphids.

In closing, we wanted to thank you for your support. We wish you a good rest of the summer. Hopefully the next newsletter is all about success at harvest time!

FROM THE TRACTOR – JASON LOVAS

What a beautiful spring/summer!

This spring saw some of the best planting weather that I can remember. It was so much fun to be out in the fields on a timely basis, making plans and being able to execute them. Spring planting is always stressful and a big "push," but at least we were able to get adequate sleep rather than pushing ourselves to the absolute limit like in the spring of '09.

The equipment ran well, too. We added a tillage tool (40-foot Gates Manufacturing coulter disk) and a row crop tractor (Caterpillar MT 765B) to our lineup before we started this spring, and both pieces of equipment played key roles in our successful planting season. Before this equipment was added, a lot of questions were discussed between Dad, Sarah, and me as to the balance between keeping equipment costs per acre as low as possible and having enough "iron" to get the job done. It seems that we have an ever-diminishing window of opportunity to get our work done. Looking back, we're confident that we made worthwhile purchases and that they will continue to play important roles for us.

The summer has seen the shop rather quiet, which means things were running smoothly. There is always the occasional breakdown or maintenance that is needed, but nothing that set us back too far. After planting we hired a couple of mechanics from Titan Machinery to go over the combines and get them ready for harvest. Routine combine maintenance costs thousands of dollars each year per machine, but the alternative – downtime during harvest – proves much more costly and stressful.

We're also busy getting the grain system ready for another drying season. Last year, we used the system to dry about 40% of our soybean crop, along with the majority of the corn crop. Everyone was pleased with how well our system was able to dry soybeans, and we won't be a bit concerned about drying soybeans in the future. It's great to have that added flexibility.

Our farm shop has added to our productivity during



Wonder if there's any way to add air conditioning??

inclement weather. Even during rainy days, having the ability to bring any piece of machinery into the shop and work on a dry concrete floor, with access to tools and shop equipment to perform our work, means we have time to get equipment ready no matter what the weather. Unfortunately, I think it also means less time off because there's always something to do!

We were also able to take advantage of the great summer weather by getting more work done on reclaiming the abandoned Leraas gravel pit. I was surprised how quickly we were able to get results. This summer we used our big scraper for moving dirt, a D8 Cat for pushing dirt and filling holes, an excavator for burying stumps, and a box scraper for leveling. We finished all the rough work in July and currently have Ellingson Drainage installing drain tile. We're excited about our results, as it appears that we will be able to farm 100% of what we've reclaimed. During the planning stages in 2006-2007, we did not expect 100% reclamation. Again, it goes to show us what can be done with proper (meaning big!) equipment. It's going to be a lot of fun to bring the planter into that field next year. We will have some finishing work to touch up after the drain tile is in, but it appears that we've got things under control.



Leraas gravel pit reclamation.

AGRONOMIST'S VIEW – SARAH LOVAS

While monitoring crops in June, I happened upon a photo opportunity that I couldn't pass up. The photo at the bottom features a field of soybeans. The left side of the photo shows soybeans that are nice and green; the right, soybeans that are yellow. This shows the difference between tiled and non-tiled ground. Over the last few years, I have received many questions about drain tile. So, I thought it might be fun to talk a little bit about it and the experiences that we have had with drain tile on our farm.

What Is Drain Tile?

Drain tile removes excess water from the soil profile through a network of perforated tubes placed below the soil surface. What does it mean to have excess water? Water-holding capacity is the water held in the soil between soil particles after the excess water has drained off. This is a basic, relatively unchangeable soil characteristic based on soil texture and organic matter. In general, as the clay and silt content and the organic matter levels increase, the water-holding capacity of the soil increases. After a rain, the soil will replenish its water-holding capacity by filling the pores around the soil particles. If excessive rains occur, the waterholding capacity is not able to store all the water, resulting in soil saturation. Drain tile removes this excess water. However, drain tile does not change the water holding capacity of the soil, and water is still stored around the soil particles. In other words, drain tile is only removing excess water. It does not contribute to drought conditions.

What Are The Benefits Of Drain Tile?

Drain tile has many benefits. There is reduced soil



Tile plow. This is used to install the drain tile into the ground. Notice the rolls of drain tile in the background.

saturation, leading to less crop drown-out in wet conditions. Also, because the soil is not saturated, planting and harvest are usually completed earlier, and other field operations tend to be executed timelier as well. There can also be a reduction in root diseases caused by wet conditions. All in all, we have noticed major benefits in tiled ground in both the corn and soybeans.

Another major benefit to drain tile is the reduction in soluble salts in the soil profile. Soluble salts are caused by saturated soils moving salts up to the soil surface. If the soil remains wet, the salts are never allowed to wash down and the soil remains salty. These salts have a significant negative effect on yield. Again, notice the picture of the soybeans. The green soybeans are on tiled ground, and the yellow soybeans are not. It can take up to five years to get the salt level to decline. However, the field in the picture has only been tiled for two years.

Drain Tile and Flooding

I have received many questions about how tiling affects flooding in the Red River Valley. The information I have received shows that drain tile may have a positive

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Difference between tiled and non-tiled ground. The left side is tiled and the right side is not.



AGRONOMIST'S VIEW CONT.

effect on flooding versus surface drainage. During a wet fall, like we saw in both 2008 and 2009, the drain tile allows excess water to drain off the field. This creates a drier soil profile for spring flooding. In the winter, the drain tile freezes and does not thaw until spring. The ground must thaw to the depth of the tile before flowing. Usually the ground doesn't thaw to that depth until after the big spring flood, holding the water below the surface until the majority of the flood waters have moved through the Valley. So, during the spring flood, drain tile doesn't necessarily help, but it certainly doesn't hinder the flood either. During the summer months, drain tile can also slow down water flow after a large rain event. Traditional surface drainage attempts to remove excess water after a rain as fast as possible, as opposed to drain tile that requires water to flow through the soil before it reaches the drain tile pipe and then runs into the ditch.

Summary

We have tiled some acres on our farm and have found yield benefits in both corn and soybeans. We have also been able to harvest and plant our tiled ground earlier in the spring and fall. Because of these benefits, we hope to continue installing drain tile on our acres.



Drain tile is perforated tubing that is inserted below the soil surface to remove excess water from the soil profile.



In March, I (Jason) volunteered my time, pickup, and trailer to haul donated clothing and medical supplies to Dr. Mendoza in El Paso, Texas. A few years ago, I went on a culture immersion trip through our church to the US/Mexico border in El Paso/Juarez. It was a great experience for me personally and gave me a better understanding about our southern border and those who live south of it. It's something I'll always remember. As a result, I had an opportunity to help by bringing supplies to Dr. Mendoza, who lives in El Paso and operates a nonprofit clinic in Juarez for those less fortunate than ourselves. I was very well received, and everyone was excited and grateful for the outpouring of support of donated items.



This photo was taken after arriving in El Paso, Texas. I (Jason) left Fargo at 7 pm on a Thursday, arrived in El Paso on Saturday morning, was unloaded by early afternoon, and made it back home by 8 am Monday morning. Not exactly a restful weekend, but it was the least that I could do.